

2013 Long-Term Monitoring Annual Report
Metal Bank Cottman Avenue Superfund Site
Philadelphia, PA

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Acronyms and Abbreviations

cm^2	square centimeters
DRBC	Delaware River Basin Commission
E&S	erosion and sediment
ft	feet
LNAPL	light non-aqueous phase liquid
LTM WP	long-term monitoring work plan
LTM	long-term monitoring
msl	above mean sea level
NPL	National Priorities List
PCB	polychlorinated biphenyl
ppm	part per million
PRP	potentially responsible party
SVOC	semivolatile organic compound
USEPA	United States Environmental Protection Agency
UST	underground storage tank

1 Introduction

This annual report is a component of the long-term monitoring (LTM) requirements associated with the Metal Bank Cottman Avenue Superfund Site (Site; Figure 1). This report summarizes the monitoring activities conducted at the Site on behalf of the Cottman Avenue potentially responsible party (PRP) group (the Group) from January 1, 2013, through December 31, 2013. Activities conducted after December 31, 2013, will be summarized in the next annual report (early 2015).

1.1 Site Background

The Site was used for the storage and reclamation of various scrap metals from 1962 until 1979, with scrap metal storage possibly continuing until 1984 or 1985.[1] The oil from electrical transformer salvage operations at the Site was reportedly discharged to a concrete catch basin connected to an underground storage tank (UST). In 1972 the UST ruptured and transformer oil containing polychlorinated biphenyls (PCBs) was released to the Delaware River.[2] The Site was added to the National Priorities List (NPL) in September 1983, and the United States Environmental Protection Agency (USEPA) issued the formal Record of Decision specifying the selected remedial approach in December 1997. Following the adoption of three consent decrees in March 2006, a revised final design specifying the details of the cleanup activities was approved (with comments) in February 2008. Construction activities took place between July 2008 and March 2010, and included the following:[3]

- Excavation of courtyard area soils and placement of a soil cap over the courtyard area and foundations of former Buildings 2, 3, 4, 5, and 6
- Power washing and sealing of the courtyard Building 7 floor slab and the railroad spur within Building 7
- Installation of a sheetpile wall at the southwestern corner of the Site
- Installation of a liquid non-aqueous phase liquid (LNAPL) interceptor trench at the southwestern corner of the Site
- Installation of erosion and sediment (E&S) control measures around the Site perimeter
- Removal of the UST near the southwest corner of the Site and removal and closure of other USTs encountered during construction of the remedy
- Excavation and off-site disposal of soil from southern area hot spots SA-2, SA-3, and SA-4/5
- Installation of a soil cap over the southern area
- Planting of vegetation to provide erosion protection, habitat, and aesthetic improvement

[1] Pre-Design Investigation Report, Metal Bank NPL Site, Philadelphia, PA. January 21, 2000. Ogden Environmental and Energy Services Co., Inc. and Hart Crowser, Inc.

[2] USEPA Metal Bank Superfund Page (http://www.epa.gov/reg3hwmd/npl/PAD046557096.htm)

[3] Metal Bank NPL Site Remediation Project – Engineer's Report. Draft May 2010. Malcolm Pirnie, Inc.

- Excavation of nearshore sediments and capping of other sediment areas previously shown to have total PCB concentrations of greater than 1 part per million (ppm)

The construction phase was officially completed when the preliminary close-out report was approved in March 2010. To ensure long-term protectiveness of the selected remedy, LTM and maintenance activities are required. These requirements are outlined in the May 2010 long-term monitoring work plan (LTM WP), revised in April 2011. This annual report summarizes the monitoring and maintenance activities performed at the Site from January 1, 2013, through December 31, 2013. The following sections describe the various monitoring components implemented during the postconstruction period and the LTM period as specified in the LTM WP.

1.2 Long-Term Monitoring Program

The LTM at the Site was initiated on July 1, 2010, and includes the following components and tasks:

	Task	Reference
1	**Groundwater Monitoring**	LTM WP § 4.3
2	**LNAPL Trench Monitoring**	LTM WP § 4.4
3	**Upland Monitoring**	LTM WP § 4.2
	E&S Control Measures	LTM WP § 4.2
	Soil Cap and Vegetation	LTM WP § 4.2
	Building 7	LTM WP § 4.2
	Sheetpile	LTM WP § 4.8
4	**Mudflat Backfill and Marine Mattress Inspections**	
	Mudflat Backfill	LTM WP § 4.6
	Marine Mattresses	LTM WP § 4.6
	Sediment Accumulation	LTM WP § 4.7
5	**Biological Monitoring**	
	Fish Tissue Study	LTM WP § 4.9
	Bioaccumulation Study	LTM WP § 4.5
	Benthic Community Survey	LTM WP § 4.5

Notes: LTM WP: LTM Work Plan, May 2010, Revised April 2011

The following sections describe the work performed by the Group to meet the LTM requirements specified in the LTM WP (May 2010, rev. April 2011), the fish study addendum (April 2011), the vegetative cover plan (July 2011, rev.1 November 2011, rev.2 January 2012), the invasive species control plan (July 2012), and the February 9, 2012 USEPA letter regarding survey requirements at the Site.

2 Groundwater Monitoring

2.1 Objective

The objective of the groundwater monitoring task is to evaluate whether contaminants may be present and migrating from groundwater to surface water. In the longer term (5+ years), the data will also be used to evaluate whether downward concentration trends can be observed.

2.2 Approach

Table 2-1 summarizes the approach for the groundwater monitoring component of the LTM program. Additional details on the specific procedures and monitoring requirements can be found in the LTM WP (May 2010, rev. April 2011) and the LTM final field sampling plan (August 2010, rev. April 2011). Analytical parameters included in the monitoring program are PCB Aroclors and semivolatile organic compounds (SVOCs). In previous years PCB congeners and dioxins were also monitored. Groundwater monitoring well locations are depicted on Figure 2.

2.3 Activities

The 2013 groundwater sampling and elevation monitoring was performed on a semiannual schedule—the second quarter (April 10-11) and fourth quarter (October 9-10)—as specified in the LTM WP. A total of 10 long-term groundwater monitoring events have now been completed since LTM began in July 2010 (see Table 2-2).

The precipitation-based action level of a 4-inch rainfall in 24 hours was exceeded in July 2013. However, supplemental groundwater elevation measurements, as required by the LTM WP, were not conducted because the 2012 Site inspection following Hurricane Sandy indicated no signs of upward LNAPL migration into the soil cap. In addition, short-lived high-intensity rain events such as the one recorded in July 2013 primarily produce runoff rather than infiltration, and major effects on groundwater elevation are not expected, nor have they been observed at the Site. We plan to prepare a formal request in 2014 to remove or adjust the precipitation-based sampling requirement.

2.4 Results

In 2013, the groundwater at the Site was sampled for PCB Aroclors and SVOCs.[4] These compounds, when present, were found at trace-level concentrations, similar to previous years. Table 2-3 summarizes the groundwater monitoring results obtained to date.

Laboratory reports containing groundwater sampling analytical data are included in Appendix A. Data validation reports, including a time series table of historical groundwater monitoring results on a well-by-well basis, are provided in Appendix B (Table 2-4).

Measured groundwater elevations at the Site in 2013 ranged from 7.11 feet (ft) above mean sea level (msl) (at MW-2) to 2.28 ft msl (at MW-6), which is within the range of groundwater elevations recorded in previous years (8.50 to 1.28 ft msl). Groundwater fluctuations at each of the wells over eight rounds of measurements since 2010 range from 1.85 ft (at MW-2) to 1.32 ft

[4] PCB congeners and dioxins were removed from the sampling program at the end of 2011 (August 25, 2011 Letter from ARCADIS to USEPA RE: Groundwater Sampling Program and October 5, 2011, USEPA Response Letter)

(at MW-6 and MW-1). A table summarizing groundwater elevations at the six on-site monitoring wells is provided in Appendix C.

2.5 Conclusions

There are no significant concentrations of contaminants of concern in Site groundwater. While there are no actionable groundwater thresholds for the Site, the contaminants that have been detected, such as PCBs and dioxins, have been found at levels well below USEPA drinking water standards. Based on the data collected to date, the objectives of the groundwater monitoring are being met, and contaminant migration via groundwater appears to be negligible.

3 Monitoring of the LNAPL Trench

3.1 Objective

The objective of the LNAPL trench monitoring task is to evaluate whether LNAPL is present and whether contaminants may be migrating from groundwater to surface water.

3.2 Approach

Table 3-1 summarizes the approach for the LNAPL trench monitoring component of the LTM program. Additional details on the specific procedures and monitoring requirements can be found in the LTM WP (May 2010, rev. April 2011) and the LTM final field sampling plan (August 2010, rev. April 2011). Figure 2 shows the location of the LNAPL trench and trench sumps.

3.3 Activities

LNAPL trench monitoring was performed quarterly in 2013, as required by the LTM. A total of 21 monitoring events have now taken place since the postconstruction period (see Table 3-2). A storm event on July 28 and 29 produced more than 4 inches of rain in a 24-hour period, triggering the LTM requirement for an additional monitoring round. The additional monitoring event was not conducted for reasons described in Section 2.3. Water depths in the LNAPL trench have not fluctuated more than a few feet since observations began in 2010 and have remained approximately 8 to10 ft below ground surface (Appendix D). Based on these observations, we do not believe soil cap recontamination occurred.

3.4 Results

No measurable free product has been observed at the LNAPL trench during any of the 21 inspections conducted to date. Measured trench groundwater elevations at the Site have ranged between approximately 0 and 2 ft msl since monitoring began. More accurate elevation measurements will be available once we survey the top of the corrugated plastic pipes in the trench vaults.[5] Groundwater fluctuations at each of the LNAPL trench sumps over 21 rounds of measurements have ranged from 2.23 ft (at Sump 2) to 1.36 ft (at Sump 1). A table summarizing LNAPL thickness and approximate groundwater elevations at the five trench sumps is provided in Appendix D.

3.5 Conclusions

The objectives of the LNAPL trench monitoring are being met. No observable amounts of LNAPL potentially containing PCBs are present in the groundwater at the Site. PCBs have relatively high solubility in oils and very low solubility in water. Therefore, the only significant transport mechanism for PCBs in the subsurface environment is the migration of LNAPL. Since the completion of the construction of the final remedy, no measurable product has been observed in the trench, which strongly suggests that no significant amounts of PCBs are

[5] LNAPL trench groundwater elevations reported prior to the 2012 Annual Report contained a mathematical error, skewing reported elevations high by approximately 4 ft. Specifically, groundwater depths were measured from the top of the corrugated pipe, but the elevations of the top of the concrete vaults were used to convert these depth measurements to groundwater elevations. The distance between the pipe and the concrete is approximately 4 ft. We used this estimate to calculate the groundwater elevations in the LNAPL trench sumps (reported in Appendix D). As a result, the trench groundwater elevation data in this report should be viewed as approximate (within 1-ft accuracy) until the top of the corrugated plastic pipes can be surveyed in the first quarter of 2014.

migrating off the Metal Bank property into the tidal mudflats and the Delaware River. Furthermore, it has been our experience that the maximum free product levels to be observed occur within three to six months of construction when soils are disturbed and oils trapped within the interstitial spaces of the soil particles are released. We have measured no observable amounts of LNAPL since the completion of construction over three years ago, and we strongly expect this trend to continue in the foreseeable future.

4 Upland Inspections

4.1 Objective

The objective of the upland inspections is to monitor features that prevent direct exposure to Site contaminants and to prevent off-site migration of contaminants via surface runoff.

4.2 Approach

The general approach to the upland inspections is to inspect and maintain measures put in place during the remedy construction phase to prevent direct exposure to Site contaminants and to prevent off-site migration of contaminants via surface runoff. These measures include the following:

- E&S control measures around the perimeter of the Site
- Two vegetated soil cap areas (courtyard area and southern area)
- The sealed floor slab at Building 7
- The sheetpile wall at the southwestern corner of the Site

Table 4-1 summarizes the approach for the upland inspection component of the LTM program. Additional details on the specific procedures and inspection requirements can be found in the LTM WP (May 2010, rev. April 2011), the LTM final field sampling plan (August 2010, rev. April 2011), the vegetative cover plan (July 2011, rev.#1 November 2011, rev.#2 January 2012), the invasive species control plan (July 2012), and USEPA correspondence dated March 22, 2011, and July 11, 2011. The features relevant to this section are depicted on Figure 2.

4.3 Activities

Table 4-2 summarizes the activities performed as part of the postconstruction upland monitoring (after final inspection). Inspection and monitoring occurred on a scheduled basis, according to the LTM requirements and the approach described in Table 4-1. Maintenance and repair activities were performed on an as-needed basis. No additional upland inspection was performed after the July 28–29 rain event that exceeded the 25-year storm criteria. The October Site inspection, however, noted no signs of erosion or sediment transport.

4.4 Results

Results of the upland monitoring, broken down by task, are summarized below:

A. Erosion and Sediment Control

E&S control measures were monitored on a quarterly schedule, as required by the LTM WP. Most quarterly inspections identified some E&S control measures in need of maintenance, replacement, and/or repair. These issues were reported to USEPA and maintained, replaced, and/or repaired, as needed. While some minor erosion has been observed within Site boundaries, there is no evidence that sediments have migrated beyond the Site perimeter E&S control measures. Site inspection reports are provided in Appendix E.

B. Vegetative Cap

1. Cap Integrity

Cap integrity has been visually assessed on a quarterly schedule, as required by the LTM WP. No signs of settlement, cracks, fissures, seeps, or direct signs of erosion were observed on the upland cap areas.

2. Vegetation Monitoring and Mowing

Vegetation monitoring was performed in May 2013. In addition, qualitative assessments of vegetative cover have been performed as part of the quarterly inspections. Vegetative cover at the Site has increased from 80% in 2012 to 89% in 2013, and continues to meet the LTM requirements of >80% site-wide coverage. Invasive species currently occupy less than 10% of the Site. Herbicide applications to control invasive species were performed in the fall, following the approach outlined in the July 2012 Invasive Species Control Plan (ENVIRON 2012). Site-wide mowing was performed in August and September. An area of invasive species was mowed in December, following earlier herbicide application.

The vegetation at the Site appears to be effectively controlling erosion of the soil caps, preventing off-site contaminant transport. No sediments have been observed at the bottom of Site outfalls near the Delaware River.

Detailed quantitative information related to the vegetative cover and invasive species is provided in Appendix F. Qualitative assessments of vegetative cover are provided in the Site inspection reports included in Appendix E.

3. Cap Surveys

The LTM WP did not require an elevation survey of the vegetated cap in 2013. A 2012 survey showed similar results to the surveys performed in 2009 and 2010, indicating that erosion to date remains minimal. A 2012 soil cap thickness assessment, confirmed that soil cap thickness continues to meet or exceed minimum design criteria. Given the well-vegetated condition of the soil cap, we expect the potential for erosion to remain low. The next cap survey is planned for 2017.

C. Building 7

The Building 7 epoxy-coated floor slab has been monitored as part of the quarterly Site inspections, which exceeds the LTM WP requirement of one floor inspection per year. No exposed patches of floor slab greater than 10 square centimeters (cm^2) have been observed, and no repairs have been necessary.

D. Sheetpile

The tilt, rotation, deflection, and condition of the southwest sheetpile wall were monitored on a quarterly basis in 2013. The sheetpile wall was observed to be in good condition and the tilt is

well below the 2-degree action level with recorded values ranging from (-0.050 to 0.092 degrees, see Appendix G). The two years of monitoring required by the LTM WP were completed in July 2012. USEPA and the Group are currently discussing a suitable monitoring program for the future.

4.5 Conclusions

Based on current inspections and observations the Site is well-vegetated, and vegetation levels on the upland caps meet LTM WP requirements for both degree of coverage (>80%) and invasive species (<10%). As a result, potential for erosion at the Site is very low. This is supported by direct visual observations, which found erosion at the Site to be negligible. Specifically, no sediments have been observed beyond the Site perimeter E&S control measures, and the cap remains in good condition. Based on the above, we conclude that the overall objectives of the upland remedy components are being met.

5 Mudflat Backfill and Marine Mattress Inspections

5.1 Objective

The objective of the mudflat backfill, marine mattress, and sediment accumulation inspections is to prevent off-site migration of contaminants via surface water.

5.2 Approach

The general approach of this task is to inspect and maintain, if necessary, measures put in place during the remedy construction phase to prevent off-site migration of contaminated sediments via surface water. This task can be broken down into the following components:

- Mudflat backfill survey and integrity verification
- Marine mattress bathymetric survey and integrity verification
- Sediment accumulation survey

No mudflat backfill or marine mattress inspection monitoring activities were required or performed in 2013. The mudflat backfill and marine mattress inspections are currently on a five-year schedule, with the next survey scheduled for 2017. The approach outlined in the LTM WP for sediment accumulation monitoring is currently being reevaluated by USEPA (see 5-Year Review).

6 Biological Monitoring

6.1 Objective

The objective of the biological monitoring program is to evaluate PCBs in fish, PCB bioaccumulation in benthos, and benthic community structure in the aquatic environment adjacent to the Site and in nearby reference areas.

6.2 Approach

Biological monitoring consists of three separate tasks: 1) a fish monitoring study, 2) in situ caged sediment bioaccumulation monitoring, and 3) collection of sediment infauna samples for community structure monitoring. These tasks were completed in 2012, and the USEPA is currently evaluating the need for additional biological monitoring activities in the future (see 5-Year review). No biological monitoring activities were required or performed in 2013.

7 Summary of Observations and Conclusions

The goal of this LTM program is to assess whether the constructed remedy is protective of human health and the surrounding environment. Specifically, the final constructed remedy was implemented to accomplish the following:

- Eliminate or substantially reduce the source of PCB contamination by excavating hot spots where the PCB contamination exceeded 25 ppm and transport these soils to an appropriately regulated receiving facility.
- Reduce exposure of PCB-impacted sediments to the aquatic environment by removing nearshore sediments exceeding a PCB concentration of 1 ppm and place the excavated sediments beneath the soil cap constructed on the upland portion of the Site.
- Prevent direct exposure to, and surface erosion of, residual soils containing low concentrations of PCBs by isolating these soils beneath a 2- to 4-foot soil cap over the upland portion of the Site.
- Prevent surface erosion of residual soils containing low concentrations of PCBs along the river banks from entering the adjacent aquatic environment by installing sheetpile walls along the Delaware River and tidal mudflat Site perimeter.
- Reduce exposure of PCB-impacted sediments to the aquatic environment by isolating offshore sediments with a PCB concentration exceeding 1 ppm beneath the marine mattress.
- Prevent LNAPL potentially containing PCBs from migrating in the subsurface environment and entering the adjacent tidal mudflat and Delaware River by removing recoverable LNAPL during the hot spot excavation and by installing an interceptor trench to monitor and recover LNAPL.

The various monitoring tasks of the LTM program were selected to ensure that the remedy components are functioning as designed and that the overall remedy is effective in meeting the goals of risk reduction. The data generated by the various monitoring tasks of the LTM program provide multiple lines of information that allow us to evaluate whether the constructed remedy is meeting the goals of risk reduction. Based on data collected during the construction and LTM phases, the following observations can be made:

- Significant sources of PCB contamination in the upland portion of the Site have been removed by excavating soils containing PCB concentrations in excess of 25 ppm which has been documented during construction and reaffirmed in the draft Engineer's Certification Report dated May 2010.
- Nearshore sediments containing PCB concentrations in excess of 1 ppm have been excavated and placed beneath the soil cap. This information has been documented during construction and reaffirmed in the draft Engineer's Certification Report dated May 2010.
- Soil cap inspections have not found any evidence of cracks, fissures, seeps, or settlement of the upland cap areas. In addition, the upland cap areas show no significant reduction in elevation compared to as-built conditions. Based on the combined visual and survey

information, the upland cap areas appear to be meeting their design objectives of preventing direct exposure to, and off-site migration of, contaminated soil particles.

- Based on the absence of sediments at the bottom of the Site outfalls, there is no evidence to suggest off-site sediment transport has occurred. In addition, vegetation levels exceed 80% site-wide coverage and will continue to improve with time, further diminishing the potential for off-site sediment migration.
- Sheetpile wall inspections have not found any breaches in the wall or any significant wall deflections. Tilt of the wall is well below 2^{o} actionable level. Based on the combined visual and tilt meter information, the sheetpile walls appear to be meeting their design objectives of preventing off-site migration of contaminated soil particles into the aquatic environment.
- The epoxy-coated floor slab of Building 7 appears to be in good condition. No areas of exposed floor slab greater than 10 cm^2 have been observed. Based on the integrity of the epoxy coating, there is no pathway for direct exposure to PCB-contaminated slab materials.
- The mudflat backfill area and marine mattress inspections and surveys conducted previously indicate no significant change in position or elevation. There is no indication that contaminated sediments are exposed at the Site or that off-site sediment transport is occurring; in fact, net sediment accumulation has been noted in the subaqueous cap areas.
- PCB LNAPL has not been observed in the monitoring trench. In addition, there are no significant concentrations of contaminants of concern in Site groundwater. While there are no actionable groundwater thresholds for the Site, the contaminants that have been detected, such as PCBs and dioxins, have been found at levels well below USEPA drinking water standards. Based on the above, groundwater transport appears to be a negligible migration pathway for Site contaminants.
- Previously conducted biological monitoring activities, including fish tissue, benthic community, and bioaccumulation studies, have failed to demonstrate any significant difference between conditions near the Metal Bank Site and conditions at reference locations, and sediment PCB concentrations at the Site are below actionable levels.

Based on the information collected during the construction and LTM phases, we conclude that the remedy is functioning as intended and is meeting the goal of overall risk reduction.

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Tables

Table 2-1. Approach to Long-Term Groundwater Monitoring

Monitoring Task	Frequency	Action Trigger	Action
Collect groundwater samples and elevation data from six on-site monitoring wells	Quarterly for first two years[a] (reduced in subsequent years	Five years of monitoring data available	Perform statistical trend analysis on groundwater data
Monitor groundwater elevations on six on-site monitoring wells	Same as above, plus following rain events greater than 4 inches in 24 hours, or 100-year flood events	Water elevations greater than soil cap elevation (11 ft msl)	Collect and analyze soil samples for PCBs (Aroclor) to evaluate potential upward LNAPL migration into soil cap

[a] Reduced to semiannual after four rounds of sampling and annual after five rounds of sampling.

ft: feet

msl: above mean sea level

PCB: polychlorinated biphenyl

LNAPL: light non-aqueous phase liquids

Table 2-2. Activities Performed for Long-Term Groundwater Monitoring

No.	Date	Groundwater Monitoring	Rationale
1	26-29-Jul-10	✓	3rd Quarter 2010 - Quarterly Monitoring
2	18-19-Oct-10	✓	4th Quarter 2010 - Quarterly Monitoring
3	10-13-Jan-11	✓	1st Quarter 2011 - Quarterly Monitoring
4	11-13-Apr-11	✓	2nd Quarter 2011 - Quarterly Monitoring
5	25-27-Jul-11	✓	3rd Quarter 2011 - Quarterly Monitoring
6	26-27-Oct-11	✓	4th Quarter 2011 - Semiannual Monitoring
7	24-25-Apr-12	✓	2nd Quarter 2012 - Semiannual Monitoring
8	17-18-Oct-12	✓	4th Quarter 2012 - Semiannual Monitoring
9	10-11-Apr-13	✓	2nd Quarter 2013 - Semiannual Monitoring
10	9-10-Oct-13	✓	4th Quarter 2013 - Semiannual Monitoring

Table 2-3. Groundwater Summary Statistics

Group	Number Analyzed	% Detects[a]	Max Result	Compound	Well	Date	Mean[c]
Dioxin/ Furans	357	16%	700[b] J pg/L	Octachloro dibenzo-p-dioxin	MW-06	Q3 2011	170 pg/L
Congeners	8,778	64%	68.6 ng/L	PCB-206	MW-03	Q3 2010	4.4 ng/L
Aroclors	630	2%	0.202 J µg/L	Aroclor-1268	MW-03	Q1 2011	0.033 µg/L
SVOCs	3,185	12%	1,070 µg/L	Naphthalene	MW-05	Q3 2010	110 µg/L

[a] Counts only those detections greater than the practical quantitation limit.

[b] A concentration of 3,520 pg/L was encountered in January 2011, however, this sample was qualified "B," indicating the presence of the contaminant in a blank.

[c] Means reported here apply only to the compound with the highest detection (Compound). The mean is calculated as the average of the mean compound concentration in each of the six on-site wells for all sampling events since 2010. "B"-qualified results are excluded from the calculation. Results below the detection limit are incorporated using a value of one-half the detection limit.

µg/L: microgram(s) per liter
J: estimated value
ng/L nanogram(s) per liter
pg/L: picogram(s) per liter
Q: quarter
SVOCs: semivolatile organic compound

Table 3-1. Approach for Long-Term LNAPL Trench Monitoring

Monitoring Task	Frequency	Action Trigger	Action
Visually observe LNAPL trench for the presence of a sheen or product layer (using interface probe if warranted)	Biweekly in first quarter, quarterly thereafter	LNAPL (oil) observed in trench	Use adsorbent booms or active pumping to remove oil
Monitor water elevation in LNAPL trench sumps	Same as above, plus following rain events greater than 4 inches in 24 hours, or 100-year flood events.	Water elevations greater than soil cap elevation (11 ft msl)	Collect and analyze soil samples for PCBs (Aroclor) to evaluate potential upward LNAPL migration into soil cap.

ft: feet
LNAPL: light non-aqueous phase liquids
msl: above mean sea level
PCB: polychlorinated biphenyl

Table 3-2. Activities Performed for Long-Term LNAPL Trench Monitoring

No.	Date	Subtask 1 Visual Observation	Subtask 2 Groundwater Elevations	Rationale
Postconstruction Period				
1	31-Mar-10	✓	✓	2nd Quarter 2010 - Biweekly Monitoring
2	14-Apr-10	✓	✓	2nd Quarter 2010 - Biweekly Monitoring
3	28-Apr-10	✓	✓	2nd Quarter 2010 - Biweekly Monitoring
4	12-May-10	✓	✓	2nd Quarter 2010 - Biweekly Monitoring
5	27-May-10	✓	✓	2nd Quarter 2010 - Biweekly Monitoring
6	9-Jun-10	✓	✓	2nd Quarter 2010 - Biweekly Monitoring
7	23-Jun-10	✓	✓	2nd Quarter 2010 - Biweekly Monitoring
LTM Period				
8	7-Jul-10	✓	✓	3rd Quarter 2010 - Quarterly Monitoring/ Final Biweekly Monitoring
9	11-Nov-10	✓	✓	4th Quarter 2010 - Quarterly Monitoring
10	10-Jan-11	✓	✓	1st Quarter 2011 - Quarterly Monitoring
11	11-Apr-11	✓	✓	2nd Quarter 2011 - Quarterly Monitoring
12	25-Jul-11	✓	✓	3rd Quarter 2011 - Quarterly Monitoring
13	27-Oct-11	✓	✓	4th Quarter 2011 - Quarterly Monitoring
14	13-Jan-12	✓	✓	1st Quarter 2012 - Quarterly Monitoring
15	25-Apr-12	✓	✓	2nd Quarter 2012 - Quarterly Monitoring
16	17-Jul-12	✓	✓	3rd Quarter 2012 - Quarterly Monitoring
17	18-Oct-12	✓	✓	4th Quarter 2012 - Quarterly Monitoring
18	25-Jan-13	✓	✓	1st Quarter 2013 - Quarterly Monitoring
19	11-Apr-13	✓	✓	2nd Quarter 2013 - Quarterly Monitoring
20	23-Jul-13	✓	✓	3rd Quarter 2013 - Quarterly Monitoring
21	9-Oct-13	✓	✓	4th Quarter 2013 - Quarterly Monitoring

LNAPL: light non-aqueos phase liquid
LTM: long-term monitoring

Table 4-1. Approach to the Upland Inspections

Monitoring Task	Frequency	Action Trigger	Action
A. Erosion and Sediment Control			
Condition Survey - visual inspection of E&S control measure integrity	Quarterly and following 25-year storm event	Signs of sediment transport and/or damage to existing E&S control measures	Notify USEPA and perform required maintenance or repair activities to restore E&S control measures
B. Vegetated Soil Cap			
1. Condition Survey - visual inspection of overall cap integrity	Quarterly and following 25-year storm event	Signs of settlement, fissures/cracks, erosion, and or seeps noted	Notify USEPA and perform required maintenance or repair activities to restore cap integrity
2. Elevation survey of capped areas	Annually (changed to one post-establishment survey and once every five years thereafter - USEPA letter 2/9/12)	Material decrease in cap thickness	Notify USEPA and perform required activities to restore cap thickness to original design specifications
3. Vegetation Survey	Semiannually in late spring and late summer for first two years (annually in mid-summer thereafter)	Less than 80% vegetative cover, bare areas, or greater than 10% invasive plant species	Notify USEPA and perform required maintenance activities, including reseeding and compost application to increase vegetative cover or herbicide application to reduce invasive species. See also Mowing (below)
4. Mowing	In second spring, every three years thereafter, and as needed to control woody species (outside of bird nesting season)	1.Second spring after seeding or when vegetation height exceeds 18”	1. Mow in weave pattern to 4”-8” (outside of nesting season)
		2. Every three years thereafter	2. Mow in weave pattern to 6”-8” (outside of nesting season)
		3.Caliper >0.5”	3.Remove woody species
		4. Invasive species	4.Mow as needed in addition to herbicide application
C. Building 7			
Condition Survey - visual inspection of epoxy-coated floor slab	Annually in spring	Exposed concrete >10 cm^2 surface area	Notify USEPA and reapply epoxy coating to exposed areas of concrete
D. Sheetpile Wall			
Sheetpile wall condition survey and tilt/rotation measurements	Monthly for six months; quarterly thereafter	Greater than 2^o sheetpile wall rotation in first two years[1]	Notify USEPA and perform required activities to stabilize the sheetpile wall. If rotation <2^o after two years monitoring will cease.

E&S: erosion and sediment

USEPA: United States Environmental Protection Agency

[1] This requirement has been met. Discussions withUS EPA are currently underway to establish a path forward with regards to sheetpile wall monitoring activities.

Table 4-2. Activities Performed for Long-Term Upland Monitoring

No.	Date	Rationale	Notes / Observations
A. Erosion and Sediment Control			
1 Notice	9-Jun-10	Notice	Provided USEPA notice of upcoming biweekly inspection scheduled for June 23, 2010
Meeting	17-Jun-10	Meeting at USEPA Office	USEPA, CDM, Group, and MPI met at USEPA offices regarding transition to LTM and with storm event E&S surveys, the movement of biweekly Site inspections to quarterly, and vegetation inspection of 6/23/10 were several of the items discussed.
1	23-Jun-10	Final postconstruction inspection prior to start of LTM	USEPA (Z. Swavely – CDM), Enviroscapes, and MPI conducted the assessment of the vegetative cover and potential path forward activities for vegetative cover. The Site visit focused on the vegetative cover.
Milestone	**1-Jul-10**	**Official Start of LTM**	**Per meeting with USEPA on 6/17/10 and 5/26/10 response to USEPA comments on 5/13/10 conditional approval of LTM**
2 Notice	23-Sep-10	Notice	USEPA provided notice of upcoming inspection scheduled for September 28, 2010, with Pa DEP
2	28-Sep-10	Quarterly inspection – 2010 Q3	Noted significant erosion along the southern edge of the southern mudflat outfall, and some of the silt fence was down along the western portion of the property. USEPA and PaDEP were present on-site.
2-R	26-27-Oct-10	Repairs (see 9/28 inspection)	Installed additional stone in the southern drainage swale on the east side of the Site and made repairs to the silt fence along the western property boundary per the USEPA email of 9/30/10.
3 Notice	16-Dec-10	Notice	Provided USEPA notice of upcoming quarterly inspection scheduled for January 4, 2011.
3	4-Jan-11	Quarterly inspection –	Site covered in snow – no E&S observations possible.
Pre-4	23-Feb-11	USEPA and City of Philadelphia conduct an E&S inspection shortly after snow melt	Sediments noted near top of outfall structures, perimeter E&S controls worn, and areas of the Site appearing unstable.
4 Notice	9-Mar-11	Notice	Provided USEPA notice of upcoming quarterly inspection scheduled for March 15, 2011.
4	15-Mar-11	Quarterly inspection – 2011 Q1	Observations similar to February 23 Inspection. E&S measures worn but functional. Repairs and adjustments needed. USEPA and PWD present on-site.
4-Plan	12-Apr-11	Group submits plan to deal with E&S issues identified in March 15 inspection and in response to USEPA March 22 comment letter	Group proposes to remove and replace wattle material along the fence line and entrance, replace hay bales as necessary along the perimeter of Outfall #1 and #2, install AASHTO No. 1 at the edge of pavement to create an entrance tire scrubber for field vehicles entering the southern area of the Site, install drainage improvements between the southern sheetpile return wall and Outfall #2, remove sediment and install additional R-3 stone and replace perimeter wattle material in Outfall #3, and remove sediment and reinstall wattle material along the perimeter of Outfall #4.
4-Plan Appr.	4-May-11	USEPA provides notice to proceed with E&S control measures proposed in April 12 letter.	USEPA recommended the use of straw or compost logs and its preference for consideration of woody species at the entrances to the outfalls.
4-R Notice	9-May-11	Notice	Provided USEPA notice of upcoming repairs scheduled to commence on May 16, 2011.
5 Notice	9-May-11	Notice	Provided USEPA notice of upcoming quarterly inspection scheduled for May 17, 2011.
4-R	16-23-May-11	Repairs (see 5/4 plan approval)	Executed the corrective measure construction per the 4/12/11 letter and USEPA approval of 5/4/11.
5	17-May-11	Quarterly inspection – 2011 Q2	No additional E&S issues noted. USEPA present on-site.
6 Notice	15-Aug-11	Notice	Provided USEPA notice of upcoming quarterly inspection scheduled for August 17, 2011.
6	17-Aug-11	Quarterly inspection – 2011 Q3	Inspection coincided with sheetpile wall monitoring.

Table 4-2. Activities Performed for Long-Term Upland Monitoring

No.	Date	Rationale	Notes / Observations
7 Notice	26-Aug-11	Notice	Provided USEPA notice of upcoming Special inspection (post-Irene) scheduled for August 29, 2011.
7	29-Aug-11	Post-Irene Site inspection	Post-hurricane Irene. Observed and repaired a small (< 20 ft.) section of silt fence near the Cottman Avenue gate.
8 Notice	10-Oct-11	Notice	Provided USEPA notice of upcoming quarterly inspection scheduled for October 27, 2011.
8	27-Oct-11	Quarterly inspection – 2011 Q4	Conducted quarterly inspection of E&S control measures. No issues identified.
8-R Notice	10-Dec-11	Notice	Provided USEPA notice of upcoming repairs scheduled to commence on December 26-27, 2011.
8-R	26/27-Dec-11	Repairs (see 10/27 inspection)	Executed repairs and provided a copy of the field report to USEPA on January 10, 2012.
9	13-Jan-12	Quarterly inspection – 2012 Q1	Conducted quarterly inspection of E&S control measures. No issues identified.
10 Notice	10-Apr-12	Notice	Provided USEPA notice of upcoming quarterly inspection scheduled for April 24, 2012.
10	24-Apr-12	Quarterly inspection – 2012 Q2	Some silt fence posts have fallen over. In addition, some silt fence has been crushed by debris from Revolution Recovery and a 20-ft section of silt fence on the northeast side is ripped. Repairs are required.
10-R Notice	10-May-12	Notice of repairs	Provided USEPA notice of upcoming minor E&S repairs scheduled for May 16, 2012.
10-R	18-May-12	Repairs (see 4/24 inspection)	Repaired silt fence damage noted during 4/24 inspection.
11	17-Jul-12	Quarterly inspection – 2012 Q3	Conducted quarterly inspection of E&S control measures. No issues identified.
12 Notice	10-Oct-12	Notice	Provided USEPA notice of upcoming quarterly inspection scheduled for October 15-17, 2012.
12	18-Oct-12	Quarterly inspection – 2012 Q4	A portion of the silt fence has fallen down. It was fixed by Lewis Environmental. No further repairs are necessary.
13 Notice	10-Oct-12	Notice	Provided USEPA notice of upcoming 5-Year Review inspection scheduled for October 23, 2012.
13	23-Oct-12	5-Year Review Inspection	No E&S action items.
14 Notice	29-Oct-12	Notice	Provided USEPA notice of upcoming post-Sandy Site inspection scheduled for November 1 or 2, 2012.
14	1-Nov-12	Post-Sandy Site inspection	Conducted inspection of E&S control measures. No issues identified.
15	15-Jan-13	Quarterly inspection – 2013 Q1	Conducted quarterly inspection of E&S control measures. No issues identified.
16 Notice	11-Mar-13	Notice	Provided USEPA notice of upcoming quarterly inspection scheduled for April 11, 2013
16	11-Apr-13	Quarterly inspection – 2013 Q2	Conducted quarterly inspection of E&S control measures. No issues identified.
17	23-Jul-13	Quarterly inspection – 2013 Q3	Conducted quarterly inspection of E&S control measures. No issues identified.
18 Notice	10-Sep-13	Notice	Provided USEPA notice of upcoming quarterly inspection scheduled for October 9, 2013
18	9-Oct-13	Quarterly inspection – 2013 Q4	Conducted quarterly inspection of E&S control measures. No issues identified.
B. Vegetated Soil Cap – (1) Cap Integrity			
1 Notice	9-Jun-10	Notice	Provided USEPA notice of upcoming biweekly inspection scheduled for June 23, 2010.
Meeting	17-Jun-10	Meeting at USEPA office	USEPA, CDM, Group, and MPI met at USEPA offices regarding transition to LTM and with storm event E&S surveys, the movement of biweekly Site inspections to quarterly, and vegetation inspection of 6/23/10 were several of the items discussed.

Table 4-2. Activities Performed for Long-Term Upland Monitoring

No.	Date	Rationale	Notes / Observations
1	23-Jun-10	Final postconstruction Inspection prior to start of LTM	USEPA (Z. Swavely – CDM), Enviroscapes, and MPI conducted the assessment of the vegetative cover and potential path forward activities for vegetative cover. Vegetation is growing or beginning to emerge on most of the capped area of the Site. However, significant portions of the southern area and an area to the north of Building 7 have little to no vegetation growing. Invasive species, such as Japanese Knotweed and Phragmites, were observed outside of the cap area along the perimeter of the Site. Enviroscapes informed the meeting attendees that the specified seed mix is a summer mix that requires an extended period of warm soil temperatures before a significant amount of plants will emerge and that it normally takes two to three years to establish a vegetative cover using this seed mix. He also presented documents verifying this, including statements in the Ernst seed catalogue. Enviroscapes also pointed out that there has been little rain recently so plants could be slow to emerge due to the lack of water. Provide a plan to USEPA for reseeding of the Site (targeted for mid to late July 2010) and elimination of invasive plant species (August 2010).
Milestone	**1-Jul-10**	**Official start of LTM**	**Per meeting with USEPA on 6/17/10 and 5/26/10 response to USEPA comments on 5/13/10 conditional approval of LTM**
2 Notice	23-Sep-11	Notice	USEPA provided notice of upcoming inspection scheduled for September 28, 2010, with PaDEP.
2	28-Sep-10	Quarterly inspection – 2010 Q3	Did not observe any signs of settlement, cracks, fissures, or seeps. Indirect effects of cap erosion noted at perimeter. USEPA and PaDEP present on-site.
3 Notice	16-Dec-10	Notice	Provided USEPA notice of upcoming quarterly inspection scheduled for January 4, 2011.
3	4-Jan-11	Quarterly inspection – 2010 Q4	Site covered in snow – no cap integrity observations possible.
Pre-4	23-Feb-11	USEPA and City of Philadelphia conduct an E&S inspection shortly after snow melt	Indirect signs of cap erosion noted by PWD, USEPA, and PaDEP.
4 Notice	9-Mar-11	Notice	Provided USEPA notice of upcoming quarterly inspection scheduled for March 15, 2011.
4	15-Mar-11	Quarterly inspection – 2011 Q1	Observations similar to February 23 inspection. USEPA and PWD present on-site.
5 Notice	9-May-11	Notice	Provided USEPA notice of upcoming quarterly inspection scheduled for May 17, 2011.
5	17-May-11	Quarterly inspection – 2011 Q2	Did not observe any signs of settlement, cracks, fissures, seeps, or erosion. USEPA present on-site.
6 Notice	15-Aug-11	Notice	Provided USEPA notice of upcoming quarterly inspection scheduled for August 17, 2011.
6	17-Aug-11	Quarterly inspection – 2011 Q3	Inspection coincided with sheetpile wall monitoring.
7 Notice	26-Aug-11	Notice	Provided USEPA notice of upcoming special inspection (post-Irene) scheduled for August 29, 2011.
7	29-Aug-11	Post-Irene Site inspection	Post-Irene. Did not observe any signs of settlement, cracks, fissures, seeps, or erosion.
8 Notice	10-Oct-11	Notice	Provided USEPA notice of upcoming quarterly inspection scheduled for October 27, 2011.
8	27-Oct-11	Quarterly inspection – 2011 Q4	No issues related to E & S control.
9	13-Jan-12	Quarterly inspection – 2012 Q1	Did not observe any signs of settlement, cracks, fissures, seeps, or erosion.
10 Notice	10-Apr-12	Notice	Provided USEPA notice of upcoming quarterly inspection scheduled for April 24, 2012.
10	24-Apr-12	Quarterly inspection – 2012 Q2	Some ruts were visible. They will be hand-graded so as not to disturb the vegetation. No other signs of settlement, cracks, fissures, seeps, or erosion.
11	17-Jul-12	Quarterly inspection – 2012 Q3	Previously noted ruts were hand-graded. Did not observe any signs of settlement, cracks, fissures, seeps, or erosion.
12 Notice	10-Oct-12	Notice	Provided USEPA notice of upcoming quarterly inspection scheduled for October 15-17, 2012.
13 Notice	10-Oct-12	Notice	Provided USEPA notice of upcoming 5-Year Review inspection scheduled for October 23, 2012.

Table 4-2. Activities Performed for Long-Term Upland Monitoring

No.	Date	Rationale	Notes / Observations
12	18-Oct-12	Quarterly inspection – 2012 Q4	Did not observe any signs of settlement, cracks, fissures, seeps, or erosion.
13	23-Oct-12	5-Year Review Inspection	No E&S action items.
14 Notice	29-Oct-12	Notice	Provided USEPA notice of upcoming post-Sandy Site inspection scheduled for November 1 or 2, 2012.
14	1-Nov-12	Post-Sandy Site inspection	Did not observe any signs of settlement, cracks, fissures, or seeps. Areas of minor erosion were observed along the berm in the south-east area of the Site.
15	15-Jan-13	Quarterly inspection – 2013 Q1	Did not observe any signs of settlement, cracks, fissures, seeps, or erosion.
16 Notice	11-Mar-13	Notice	Provided USEPA notice of upcoming quarterly inspection scheduled for April 11, 2013.
16	11-Apr-13	Quarterly inspection – 2013 Q2	Did not observe any signs of settlement, cracks, fissures, seeps, or erosion.
17	23-Jul-13	Quarterly inspection – 2013 Q3	Did not observe any signs of settlement, cracks, fissures, seeps, or erosion.
18 Notice	10-Sep-13	Notice	Provided USEPA notice of upcoming quarterly inspection scheduled for October 9, 2013.
18	9-Oct-13	Quarterly inspection – 2013 Q4	Did not observe any signs of settlement, cracks, fissures, seeps, or erosion.
B. Vegetated Soil Cap – (2) Cap Survey			
1	8/10-Dec-10	Postconstruction survey	Survey results indicated no material change in cap thickness since 2009 as-built survey (<0.2% difference). Depending on data interpolation method change in cap thickness ranges from +0.20% to -0.12%.
Letter	9-Feb-12	USEPA letter	USEPA concludes that cap erosion may have occurred and requests a soil cover thickness assessment.
2 Notice	10-May-12	Notice	Provided USEPA notice of upcoming upland cap monitoring and cap thickness assessment.
2	23/25-May-12	Upland survey and cap thickness assessment	Survey results were similar to previous surveys, indicating that erosion to date has been minimal. The upland cap thickness continues to meet design requirements. USEPA contractor on-site.
B. Vegetated Soil Cap – (3) Vegetation Monitoring, and (4) Mowing			
1 Notice	9-Jun-10	Notice	Provided USEPA notice of biweekly inspection scheduled for June 9, 2010.
1	9-Jun-10	Biweekly inspection	Note invasive species around perimeter of the Site. Significant portions of the southern area and an area north of Building 7 have little or no vegetation growing.
Meeting	17-Jun-10	Meeting at USEPA office	USEPA, CDM, Group, and MPI meet at USEPA offices regarding transition to LTM and with storm event E&S surveys, the movement of biweekly Site inspections to quarterly, and vegetation inspection of 6/23/10 were several of the items discussed.
1b Notice	17-Jun-10	Notice	Provided USEPA notice of upcoming vegetative cover assessment scheduled for June 23, 2010.
1b	23-Jun-10	Final postconstruction Inspection prior to start of LTM and semiannual vegetation assessment	Group and USEPA note invasive species around perimeter of the Site. Significant portions of the southern area and an area north of Building 7 have little or no vegetation growing.
1b Plan	29-Jun-10	Reseeding plan	Group submits plan for reseeding and elimination of the invasive plant species on the Site (See 6/23/2010 inspection).
Milestone	**1-Jul-10**	**Official start of LTM**	**Per meeting with USEPA on 6/17/10 and 5/26/10 response to USEPA comments on 5/13/10 conditional approval of LTM**
1b-R Notice	4-Aug-10	Notice	Provided USEPA notice of upcoming reseeding scheduled for August 12-13, 2010.
1b-Ra	12-13-Aug-10	Reseeding	Reseeded entire vegetative cover with Ernst 123 using a Truax drill seeder.

Table 4-2. Activities Performed for Long-Term Upland Monitoring

No.	Date	Rationale	Notes / Observations
1b-Rb	27-Aug-10	Invasives - herbicide application	Applied USEPA-approved herbicide to phragmites and knotweed at fence line along Milnor Street and Cottman Avenue, eastern boundary, and the Delaware River stream bank at the southern end of the southern cap.
1b-Rc	22-23-Sep-10	Invasives – mechanical removal	Mechanically remove herbicide treated invasives along Site perimeter.
	28-Sep-10	Inspection by USEPA and PaDEP with MPI	USEPA and PaDEP indicated their perspective of lack of vegetation on cap.
2	11-Oct-10	Internal meeting with Ernst and Enviroscapes based on Sept 28, 2010 meeting with USEPA and PaDEP	Group meets with seed mix provider to assess vegetation growth relative to expectations of the conditions to date.
Letter	25-Oct-10	USEPA letter	USEPA documents their position on the lack of vegetation on the cap and directs Group to provide a corrective measures plan to stabilize the cover.
2 Plan	18-Nov-10	Reseeding plan / notice	Presented seed mix provider's plan to USEPA to improve vegetation condition at the Site. Propose reseeding with a cover crop and reassessing after 2011 growing season. Work is proposed to commence on December 8, 2010.
2- Plan Appr.	23-Nov-10	Approval of reseeding plan	USEPA approves reseeding plan
2-R	8-Dec-10	Reseeding	Reseeded with cover crop per 11/18 plan. Provide USEPA with documentation upon completion (12/9).
3 Notice	May-11 and 9-Jun-11	Notice	Provided USEPA notice of upcoming vegetation assessment scheduled for June 10, 2011 (at meeting of 5/11 and email of USEPA meeting minutes on 6/9/11).
3	10-Jun-11	Semiannual vegetation assessment	USEPA, Group, and seed mix provider performed vegetation assessment. Vegetation in most areas greater than 24". Some specific areas have poor establishment of vegetative cover. Seed mix provider suggests mowing and addressing areas of poor cover.
3 Plan	14-Jul-11	Mowing plan /notice	Proposed to implement seed mix provider recommendations made at 6/10 Site visit. Propose start date of 7/21/11.
3 Plan Appr.	18-Jul-11	Approval of mowing plan	USEPA approved proposed plan and requests notice. In addition, USEPA requests vegetative cover plan by 7/27/2011.
3-R Notice	18-Jul-11	Notice	Provided USEPA notice of upcoming mowing activities scheduled for July 21, 2010.
3-R	21-Jul-11	Mowing	Complete mowing per approved approach communicated to USEPA on 7/14. Provide USEPA with update upon mowing completion (7/22/2011).
3-R Plan	25-Jul-11	Vegetative cover plan	Group provided USEPA with an overall vegetative cover plan including key LTM aspects, technical information from seed mix provider regarding the 2-3 year duration for native seed establishment, previously performed corrective measures, new short term corrective measures, long-term mowing plan, LTM and inspections, and application of fertilizers/water/herbicides.
4 Notice	23-Sep-11	Notice	Provided USEPA notice of upcoming vegetation assessment scheduled for September 27, 2011.
4	27-Sep-11	Semiannual vegetation assessment	USEPA and Group met on Site to observe the condition of the vegetation and to discuss (1) the need for mowing, and (2) the areas to be rehabilitated through the addition of compost and new seed. Vegetation observed >24" tall requiring mowing. Compost and seed to be added to certain areas and areas where previous vehicular traffic compacted soil.
4 Plan	28-Sep-11	Compost approval	USEPA approved source of compost.

Table 4-2. Activities Performed for Long-Term Upland Monitoring

No.	Date	Rationale	Notes / Observations
4 Plan	29-Sep-11	Vegetation rehabilitation plan	Group provided comments to USEPA regarding extent of areas to be composted and reseeded and the mowing prior to composting/reseeding.
4 Plan Appr.	28/30-Sep-11	Approval of rehabilitation Plan	USEPA approves rehabilitation plan.
4-R Notice	29-Sep-11	Notice	Provided USEPA notice of upcoming vegetation cutting scheduled for October 10-11, 2011.
4-R	10/11-Oct-11	Mowing/rehabilitation	Mowed Site prior to implementing rehab plan. Added compost and reseeded the Site in accordance with the USEPA-approved vegetation rehabilitation plan (9/29).
Letter	19-Oct-11	Vegetation plan moving forward	USEPA issued letter to Group responding to the 9/29/11 response to comments along with the vegetative cover plan of 7/25/11. USEPA requests that the long-term plan address woody species and a vegetative cutting plan every three years, enhance the invasive species control strategy, and revision of the vegetation plan of the LTM to incorporate USEPA recommendations.
4-R Plan	9-Jan-12	Vegetative cover plan	Submit second revision of vegetative cover plan to USEPA
5 Notice	10-Apr-12	Notice	
5	23-May-10	Annual Vegetation Inspection	Attended by USEPA. Overall vegetative cover is good, though some sparsely vegetated areas remain. These areas will be addressed.
5 B	30/31-May-12	Complete Vegetation Survey/Inspection	Completed the site-wide vegetation inspection for invasive species and vegetative cover.
5 Report	26-Jun-12	Submit Vegetative Cover Inspection Report	Site-wide average vegetative cover >80% (though some areas are sparsely vegetated and will be addressed), and invasive species <10% (though management options are being considered).
5-R Plan A	19-Jul-12	Invasive Species Control Plan	Outlines approach to invasive species control. Recommends combination of mowing and herbicide application. Herbicide application scheduled for late August/early September. USEPA approval needed.
5-R Plan A,B Notice	24-Jul-12	Notice	Provide USEPA with preliminary schedule for seeding/mowing/herbicide application.
5-R Plan B	10-Aug-12	Propose seed/amendment mix to use on sparse areas	USEPA approval pending.
5-R Plan B Appr.	11-Sep-12	EPA approves seed/amendment mix	USEPA approves seed/amendment mix.
5-R B	1/2-Oct-12	Mowing/reseeding	Mowed entire Site and reseeded sparsely vegetated areas identified during May 23, 2012, vegetation inspection, using seed/amendment mix approved on September 11, 2012. Due to the timing of USEPA's herbicide application approval, we will not be able to apply herbicide until spring 2013 (see Invasive Species Control Plan 7/19/2012).
6 Notice	10-Oct-12	Notice	Provided USEPA notice of upcoming 5-Year Review inspection scheduled for October 23, 2012.
6	23-Oct-12	5-Year Review Inspection	Grass needs to be cut between Site perimeter and fence, and cuttings may possibly need to be removed if found to negatively affect vegetative growth.
6-R	30-Nov-12	Mowing	Cut the grass between the Site perimeter and fence, as identified during the 5-Year Review.
7 Notice	10-Apr-13	Notice	Provided USEPA notice of upcoming vegetation inspection scheduled for the week of May 13, 2013.
7	14-May-13	Annual Vegetation Inspection	Overall vegetative cover is >80%, invasives are below 10% threshold.
8	12-Jun-13	Follow-up Invasive Species Inspection	Performed a follow-up invasive species inspection at the Site to verify vetch species identification
9 Notice	10-Jul-13	Notice	Provided USEPA notice of upcoming mowing activities scheduled for the week of August 26, 2013.

Table 4-2. Activities Performed for Long-Term Upland Monitoring

No.	Date	Rationale	Notes / Observations
9	28-Aug-13	Mowing	Mowed one-half of the Site and stopped due to rain. Invasive species not mowed to allow for herbicide application.
9-R	3-Sep-13	Mowing	Mowed remaining portions of Site. Invasive species not mowed to allow for herbicide application.
10-11 Notice	10-Sep-13	Notice	Provided USEPA notice of upcoming initial herbicide application scheduled for week of September 23, 2013, and follow-up herbicide application scheduled for the week of October 21, 2013.
10	25-Sep-13	Herbicide Application	Applied herbicide to specified vetch areas and other areas of invasives (knotweed and phragmites) within a larger grassy area, as well as along the fence line, along perimeters of buildings, and riprap areas.
11	24-Oct-13	Herbicide Application	Follow-up herbicide application primarily of knotweed along perimeter.
12	4-Dec-13	Mowing	Mowed areas of standing invasive species not previously mowed.
C. Building 7			
1 Notice	11-May-10/25-May-10	Notice	Provided USEPA notice of biweekly inspections scheduled for August May 12 and May 26, respectively.
1	12-May-10/26-May-10	Biweekly inspections	Conducted inspection of Building 7.
2	17-May-11	Quarterly inspection – 2011 Q2	Noted a large chip of epoxy outside of the southeastern corner of the containment area. Area along west wall of Building needs to be monitored/ reinspected No exposed floor slab noted.
3 Notice	26-Aug-11	Notice	Provided USEPA notice of upcoming quarterly inspection scheduled for August 29, 2011.
3	29-Aug-11	Quarterly inspection – 2011 Q3	Post-Irene. No exposed floor slab noted.
4 Notice	10-Oct-11	Notice	Provided USEPA notice of upcoming quarterly inspection scheduled for October 27, 2011.
4	27-Oct-11	Quarterly inspection – 2011 Q4	No exposed floor slab noted.
5	13-Jan-12	Quarterly inspection – 2012 Q1	Much of the floor covered in water. Unable to fully assess the state of the epoxy coating.
6 Notice	10-Apr-12	Notice	Provided USEPA notice of upcoming quarterly inspection scheduled for April 24, 2012.
6	24-Apr-12	Quarterly inspection – 2012 Q2	Some cracks were visible, but no exposed floor slab was noted.
7	17-Jul-12	Quarterly inspection – 2012 Q3	Some cracks were visible, but no exposed floor slab was noted.
8 Notice	10-Oct-12	Notice	Provided USEPA notice of upcoming quarterly inspection scheduled for October 15-17, 2012.
8	18-Oct-12	Quarterly inspection – 2012 Q4	Some cracks were visible, but no exposed floor slab was noted.
9 Notice	10-Oct-12	Notice	Provided USEPA notice of upcoming 5-Year Review inspection scheduled for October 23, 2012.
9	23-Oct-12	5-Year Review Inspection	No cracks in the epoxy coated floor were greater than 100 square centimeters, requiring repair with patch coating.
10	15-Jan-13	Quarterly inspection – 2013 Q1	Some cracks were visible, but no exposed floor slab was noted.
11 Notice	11-Mar-13	Notice	Provided USEPA notice of upcoming quarterly inspection scheduled for April 11, 2013.
11	11-Apr-13	Quarterly inspection – 2013 Q2	Some cracks were visible, but no exposed floor slab was noted.
12	23-Jul-13	Quarterly inspection – 2013 Q3	Some cracks were visible, but no exposed floor slab was noted.
13 Notice	10-Sep-13	Notice	Provided USEPA notice of upcoming quarterly inspection scheduled for October 9, 2013.
13	9-Oct-13	Quarterly inspection – 2013 Q4	Some cracks were visible, but no exposed floor slab was noted.

Table 4-2. Activities Performed for Long-Term Upland Monitoring

No.	Date	Rationale	Notes / Observations
D. Sheetpile Wall			
1	24-Aug-10	Monthly inspection – Month 1	Sheetpile in good condition – no material tilt/rotation observed or measured.
2	28-Sep-10	Monthly inspection – Month 2	Sheetpile in good condition – no material tilt/rotation observed or measured.
3	26-Oct-10	Monthly inspection – Month 3	Sheetpile in good condition – no material tilt/rotation observed or measured.
4	2-Dec-10	Monthly inspection – Month 4	Sheetpile in good condition – no material tilt/rotation observed or measured.
5	2-Jan-11	Monthly inspection – Month 5	Sheetpile in good condition – no material tilt/rotation observed or measured.
6	3-Feb-11	Monthly inspection – Month 6	Sheetpile in good condition – no material tilt/rotation observed or measured.
7	17-May-11	Quarterly inspection – 2011 Q2	Sheetpile in good condition – no material tilt/rotation observed or measured.
8	17-Aug-11	Quarterly inspection – 2011 Q3	Sheetpile in good condition – no material tilt/rotation observed or measured.
9	16-Nov-11	Quarterly inspection – 2011 Q4	Sheetpile in good condition – no material tilt/rotation observed or measured.
10	13-Jan-12	Quarterly inspection – 2012 Q1	Sheetpile in good condition – no material tilt/rotation observed or measured.
11	25-Apr-12	Quarterly inspection – 2012 Q2	Sheetpile in good condition – no material tilt/rotation observed or measured.
12	17-Jul-12	Quarterly inspection – 2012 Q3	Sheetpile in good condition – no material tilt/rotation observed or measured. Two-year monitoring period completed per LTM requirements.
13	23-Oct-12	5-Year Review Inspection	No deflections or separations of individual steel sheets. No rust or corrosion visible. Previous repairs continue to function. Slight bulging of western return wall. Small gullies in soils near tiebacks, and potential stress cracks in upland soils 50 ft from the wall.
14	27-Nov-12	Follow-up sheet pile wall inspection	Complete inspection results pending.
15	25-Jan-13	Quarterly inspection – 2013 Q1	Sheetpile in good condition – no material tilt/rotation observed or measured. Eastern location reading was determined to be incorrect due to damaged wires.
16	11-Apr-13	Quarterly inspection – 2013 Q2	Sheetpile in good condition – no material tilt/rotation observed or measured. Eastern location reading was at expected values, confirming the incorrect reading in January 2013.
14 Report	17-May-13	Sheetpile Wall Inspection Report	Submitted sheetpile wall inspection report to USEPA.
17	23-Jul-13	Quarterly inspection – 2013 Q3	Sheetpile in good condition – no material tilt/rotation observed or measured.
18	9-Oct-13	Quarterly inspection - 2013 Q4	Sheetpile in good condition – no material tilt/rotation observed or measured.

CDM: Camp Dresser McKee

E&S: erosion and sediment

LNAPL: light non-aqueous liquids

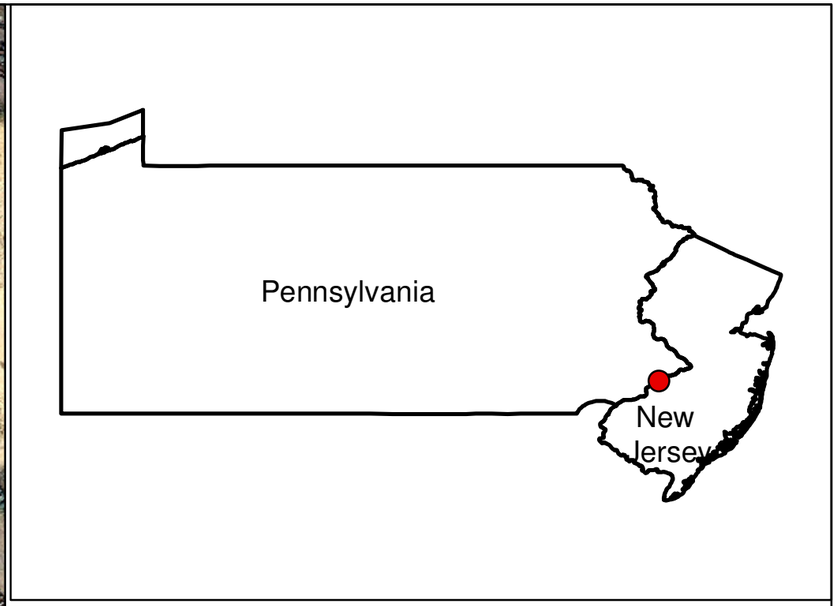
LTM: long-term monitoring report

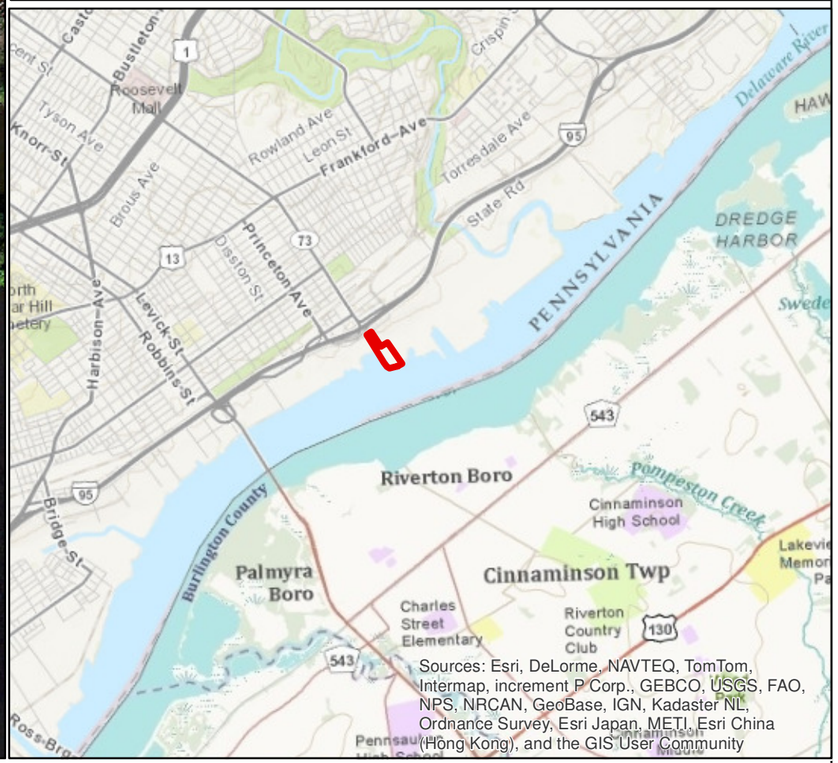
MPI: Malcolm Pirnie

USEPA: United States Environmental Protection Agency

Q: quarter

Figures





ENVIRON

Site Location Map
Metal Bank Superfund Site
Philadelphia, PA

Figure 1

GENERAL NOTES

PROJECT COORDINATE SYSTEM:
HORIZONTAL: PENNSYLVANIA STATE PLANE COORDINATE SYSTEM (SPCS), PA SOUTH ZONE, NORTH AMERICAN DATUM (NAD) 83/92.
VERTICAL: NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88)

SITE BENCHMARK: MAG NAIL IN UTILITY POLE (NO IDENTIFICATION NUMBERS–PRIVATE POLE)
ELEVATION: 12.07'
DATUM: NAVD 88

LOCATION OF THE SUBAQUEOUS CAPS AND BUTTRESS' WERE LOCATED WITH THE ASSISTANCE OF A DIVE TEAM AND BOAT AND SHOULD BE CONSIDERED +/– ONE FOOT."

BASEMAP FROM FIGURE ENTITLED "SITE PLAN" BY RETTEW ASSOCIATES, INC. DATED DECEMBER 2010.

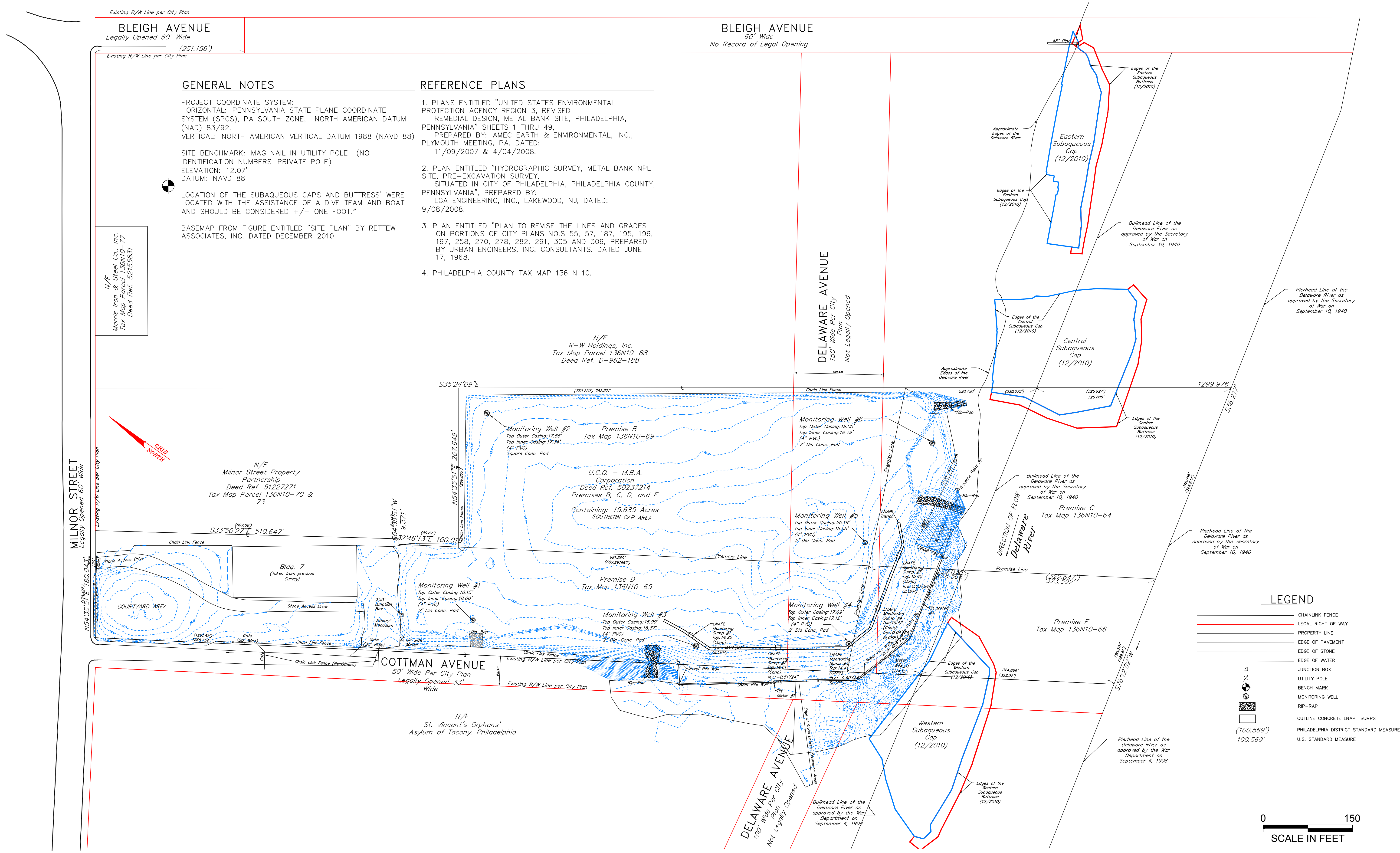
REFERENCE PLANS

1. PLANS ENTITLED "UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 3, REVISED REMEDIAL DESIGN, METAL BANK SITE, PHILADELPHIA, PENNSYLVANIA" SHEETS 1 THRU 49, PREPARED BY: AMEC EARTH & ENVIRONMENTAL, INC., PLYMOUTH MEETING, PA, DATED: 11/09/2007 & 4/04/2008.

2. PLAN ENTITLED "HYDROGRAPHIC SURVEY, METAL BANK NPL SITE, PRE–EXCAVATION SURVEY, SITUATED IN CITY OF PHILADELPHIA, PHILADELPHIA COUNTY, PENNSYLVANIA", PREPARED BY: LGA ENGINEERING, INC., LAKEWOOD, NJ, DATED: 9/08/2008.

3. PLAN ENTITLED "PLAN TO REVISE THE LINES AND GRADES ON PORTIONS OF CITY PLANS NO.S 55, 57, 187, 195, 196, 197, 258, 270, 278, 282, 291, 305 AND 306, PREPARED BY URBAN ENGINEERS, INC. CONSULTANTS. DATED JUNE 17, 1968.

4. PHILADELPHIA COUNTY TAX MAP 136 N 10.



JHNATKO 1/22/13 [SITE LAYOUT FOR ANNUAL REPORT–2]
C:\USERS\JHNATKO\DOCUMENTS\WORK\METALBANK

ENVIRON

DRAFTED BY: JPH | DATE: JANUARY 2013

SITE LAYOUT
METAL BANK NPL SITE
PHILADELPHIA, PENNSYLVANIA

FIGURE **2**

Appendix A

Groundwater Sampling Laboratory Reports

ANALYTICAL REPORT

Job Number: 180-26012-1

Job Description: Metal Bank Site

For:
ENVIRON International Corp.
214 Carnegie Center
Suite 200
Princeton, NJ 08540

Attention: Jessica Penetar

Approved for release.
Debra Bowen
Project Manager I
10/25/2013 11:37 AM

Designee for
Carrie L Gamber, Senior Project Manager
301 Alpha Drive, Pittsburgh, PA, 15238
(412)963-2428
carrie.gamber@testamericainc.com
10/25/2013

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238
Tel (412) 963-7058 Fax (412) 963-2468 www.testamericainc.com

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CASE NARRATIVE

Client: ENVIRON International Corp.

Project: Metal Bank Site

Report Number: 180-26012-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 10/12/2013; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 5 coolers at receipt time were 1.2º C, 2.2º C, 2.6º C, 3.1º C and 3.9º C.

One of the Amber liters for sample MB-MW-04-20131009 PCB analysis was received half full. There is sufficient volume for analysis.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

3,3'-Dichlorobenzidine and Diethyl phthalate failed the recovery criteria low for the MS/MSD of sample MB-MW-02-20131009 (180-26012-1) in batch 180-87081. The associated laboratory control sample (LCS) recovery met acceptance criteria.

POLYCHLORINATED BIPHENYL

DCB Decachlorobiphenyl (Surr) failed the surrogate recovery criteria low for MB-MW-06-20131010 (180-26012-6).

Tetrachloro-m-xylene failed the surrogate recovery criteria high for MB-MW-05-20131010 (180-26012-8).

PCB-1016 and PCB-1260 failed the recovery criteria high for LCS 180-86783. These compounds were not detected in the associated samples. The positive bias is not believed to have an impact on data quality; therefore, all results are reported.

PCB-1016 and PCB-1260 failed the recovery criteria high for the MS/MSD of sample MB-MW-02-20131009 (180-26012-1).

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: 733 Analysis Batch Number: 86218

Lab Sample ID: IC 180-86218/2 Client Sample ID:

Date Analyzed: 10/09/13 05:24 Lab File ID: N1009IC1.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	1.68	Peak Not Found	piccolinov	10/09/13 08:15
N-Nitrosodimethylamine	2.32	Poor Chromatography	piccolinov	10/09/13 08:15
Pyridine	2.43	Poor Chromatography	piccolinov	10/09/13 08:15
Benzidine	11.98	Peak Not Found	piccolinov	10/09/13 08:16
3,3'-Dichlorobenzidine	14.01	Peak Not Found	piccolinov	10/09/13 08:16
Bis(2-ethylhexyl) phthalate	14.05	Peak Not Found	piccolinov	10/09/13 08:16
Di-n-octyl phthalate	15.37	Peak Not Found	piccolinov	10/09/13 08:16
Benzo[a]pyrene	16.93	Poor Chromatography	piccolinov	10/09/13 08:16
Indeno[1,2,3-cd]pyrene	19.29	Poor Chromatography	piccolinov	10/09/13 08:17
Dibenz(a,h)anthracene	19.32	Poor Chromatography	piccolinov	10/09/13 08:17
Benzo[g,h,i]perylene	19.90	Poor Chromatography	piccolinov	10/09/13 08:17

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: 733 Analysis Batch Number: 86218

Lab Sample ID: IC 180-86218/3 Client Sample ID:

Date Analyzed: 10/09/13 05:49 Lab File ID: N1009IC2.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	1.70	Poor Chromatography	piccolinov	10/09/13 08:17
N-Nitrosodimethylamine	2.34	Poor Chromatography	piccolinov	10/09/13 08:17
Pyridine	2.41	Poor Chromatography	piccolinov	10/09/13 08:17
Benzoic acid	7.19	Poor Chromatography	piccolinov	10/09/13 08:17
2,4-Dinitrophenol	9.17	Poor Chromatography	piccolinov	10/09/13 08:18
2,3,4,6-Tetrachlorophenol	9.44	Poor Chromatography	piccolinov	10/09/13 08:18
4,6-Dinitro-2-methylphenol	9.68	Poor Chromatography	piccolinov	10/09/13 08:18
Pentachlorophenol	10.35	Poor Chromatography	piccolinov	10/09/13 08:18
Benzidine	12.00	Poor Chromatography	piccolinov	10/09/13 08:18
Di-n-octyl phthalate	15.39	Peak Not Found	piccolinov	10/09/13 08:19
7,12-Dimethylbenz(a)anthracene	16.25	Poor Chromatography	piccolinov	10/09/13 08:19
Benzo[k]fluoranthene	16.32	Poor Chromatography	piccolinov	10/09/13 08:19
Benzo[a]pyrene	16.95	Poor Chromatography	piccolinov	10/09/13 08:19
Indeno[1,2,3-cd]pyrene	19.31	Poor Chromatography	piccolinov	10/09/13 08:19
Dibenz(a,h)anthracene	19.35	Poor Chromatography	piccolinov	10/09/13 08:19
Benzo[g,h,i]perylene	19.92	Poor Chromatography	piccolinov	10/09/13 08:19

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: 733 Analysis Batch Number: 86218

Lab Sample ID: IC 180-86218/4 Client Sample ID:

Date Analyzed: 10/09/13 06:15 Lab File ID: N1009IC3.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Pyridine	2.41	Poor Chromatography	piccolinov	10/09/13 08:19
Benzoic acid	7.19	Poor Chromatography	piccolinov	10/09/13 08:20
2,4-Dinitrophenol	9.16	Poor Chromatography	piccolinov	10/09/13 08:20
2-Naphthylamine	9.45	Poor Chromatography	piccolinov	10/09/13 08:20
4,6-Dinitro-2-methylphenol	9.66	Poor Chromatography	piccolinov	10/09/13 08:20
Benzidine	11.99	Poor Chromatography	piccolinov	10/09/13 08:20
3,3'-Dichlorobenzidine	14.01	Poor Chromatography	piccolinov	10/09/13 08:21
Chrysene	14.15	Poor Chromatography	piccolinov	10/09/13 08:21
Di-n-octyl phthalate	15.38	Peak Not Found	piccolinov	10/09/13 08:21
Benzo[a]pyrene	16.94	Poor Chromatography	piccolinov	10/09/13 08:21
Indeno[1,2,3-cd]pyrene	19.29	Poor Chromatography	piccolinov	10/09/13 08:21
Dibenz(a,h)anthracene	19.34	Poor Chromatography	piccolinov	10/09/13 08:21
Benzo[g,h,i]perylene	19.90	Poor Chromatography	piccolinov	10/09/13 08:21

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: 733 Analysis Batch Number: 86218

Lab Sample ID: ICIS 180-86218/5 Client Sample ID:

Date Analyzed: 10/09/13 06:40 Lab File ID: N1009IC4.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	1.72	Poor Chromatography	piccolinov	10/09/13 08:22
N-Nitrosodimethylamine	2.35	Poor Chromatography	piccolinov	10/09/13 08:22
Pyridine	2.41	Poor Chromatography	piccolinov	10/09/13 08:22
Benzoic acid	7.22	Poor Chromatography	piccolinov	10/09/13 08:22
4,6-Dinitro-2-methylphenol	9.67	Poor Chromatography	piccolinov	10/09/13 08:22
Benzo[a]pyrene	16.97	Poor Chromatography	piccolinov	10/09/13 08:23
Indeno[1,2,3-cd]pyrene	19.33	Poor Chromatography	piccolinov	10/09/13 08:23
Dibenz(a,h)anthracene	19.36	Poor Chromatography	piccolinov	10/09/13 08:23
Benzo[g,h,i]perylene	19.94	Poor Chromatography	piccolinov	10/09/13 08:23

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: 733 Analysis Batch Number: 86218

Lab Sample ID: IC 180-86218/6 Client Sample ID:

Date Analyzed: 10/09/13 07:06 Lab File ID: N1009IC5.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Pyridine	2.41	Poor Chromatography	piccolino v	10/09/13 08:24
N-Nitrosodi-n-propylamine	6.63	Poor Chromatography	piccolino v	10/09/13 08:24
Benzoic acid	7.22	Poor Chromatography	piccolino v	10/09/13 08:24
Caprolactam	7.84	Poor Chromatography	piccolino v	10/09/13 08:25
Benzidine	11.99	Poor Chromatography	piccolino v	10/09/13 08:25
3,3'-Dichlorobenzidine	14.01	Poor Chromatography	piccolino v	10/09/13 08:25

Lab Sample ID: IC 180-86218/7 Client Sample ID:

Date Analyzed: 10/09/13 07:31 Lab File ID: N1009IC6.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.27	Poor Chromatography	piccolino v	10/09/13 08:39
Caprolactam	7.87	Peak Not Found	piccolino v	10/09/13 08:40
Atrazine	10.20	Poor Chromatography	piccolino v	10/09/13 08:40

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: 733 Analysis Batch Number: 86218

Lab Sample ID: IC 180-86218/8 Client Sample ID:

Date Analyzed: 10/09/13 07:56 Lab File ID: N1009IC7.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
N-Nitrosodimethylamine	2.37	Poor Chromatography	piccolino v	10/09/13 09:14
Benzoic acid	7.29	Poor Chromatography	piccolino v	10/09/13 09:14

Lab Sample ID: IC 180-86218/9 Client Sample ID:

Date Analyzed: 10/09/13 08:22 Lab File ID: N1009IC8.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
N-Nitrosodimethylamine	2.39	Poor Chromatography	piccolino v	10/09/13 09:14
Benzoic acid	7.26	Poor Chromatography	piccolino v	10/09/13 09:15

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: 733 Analysis Batch Number: 86218

Lab Sample ID: ICV 180-86218/10 Client Sample ID:

Date Analyzed: 10/09/13 08:47 Lab File ID: N1009SV1.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,2'-oxybis[1-chloropropane]	6.51	Poor Chromatography	piccolinov	10/09/13 09:38
2,4-Dimethylphenol	7.14	Poor Chromatography	piccolinov	10/09/13 09:39
Benzoic acid	7.21	Poor Chromatography	piccolinov	10/09/13 09:39
2,4-Dinitrophenol	9.16	Poor Chromatography	piccolinov	10/09/13 09:40
4,6-Dinitro-2-methylphenol	9.67	Poor Chromatography	piccolinov	10/09/13 09:40
Pentachlorophenol	10.34	Poor Chromatography	piccolinov	10/09/13 09:40
Benzidine	12.01	Poor Chromatography	piccolinov	10/09/13 09:41

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: 733 Analysis Batch Number: 87081

Lab Sample ID: CCVIS 180-87081/25 Client Sample ID:

Date Analyzed: 10/17/13 11:11 Lab File ID: N10170CC.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
N-Nitrosodimethylamine	2.32	Peak Not Found	piccolino v	10/17/13 11:58
Pyridine	2.39	Peak Not Found	piccolino v	10/17/13 11:58
Benzoic acid	7.24	Poor Chromatography	piccolino v	10/17/13 11:58

Lab Sample ID: LCS 180-86837/2-A Client Sample ID:

Date Analyzed: 10/17/13 13:20 Lab File ID: N1017006.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,2'-oxybis[1-chloropropane]	6.55	Poor Chromatography	piccolino v	10/18/13 05:51

Lab Sample ID: 180-26012-1 Client Sample ID: MB-MW-02-20131009

Date Analyzed: 10/17/13 14:12 Lab File ID: N1017007.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Diethyl phthalate	9.45	Peak Not Found	piccolino v	10/18/13 05:53
2,4,6-Tribromophenol (Surr)	9.89	Peak Not Found	piccolino v	10/18/13 05:54
Phenanthrene-d10	10.55	Peak Not Found	piccolino v	10/18/13 05:52
Perylene-d12	17.06	Poor Chromatography	piccolino v	10/18/13 05:52

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: 733 Analysis Batch Number: 87081

Lab Sample ID: 180-26012-1 MS Client Sample ID: MB-MW-02-20131009 MS

Date Analyzed: 10/17/13 15:04 Lab File ID: N1017008.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,2'-oxybis[1-chloropropane]	6.54	Poor Chromatography	piccolinov	10/18/13 05:55
3-Nitroaniline	9.09	Poor Chromatography	piccolinov	10/18/13 05:55
4-Nitroaniline	9.66	Poor Chromatography	piccolinov	10/18/13 05:56
4,6-Dinitro-2-methylphenol	9.68	Peak Not Found	piccolinov	10/18/13 05:56
N-Nitrosodiphenylamine	9.74	Peak Not Found	piccolinov	10/18/13 05:56
2,4,6-Tribromophenol (Surr)	9.88	Peak Not Found	piccolinov	10/18/13 05:58
4-Bromophenyl phenyl ether	10.09	Peak Not Found	piccolinov	10/18/13 05:56
Hexachlorobenzene	10.18	Peak Not Found	piccolinov	10/18/13 05:56
Atrazine	10.22	Peak Not Found	piccolinov	10/18/13 05:56
Pentachlorophenol	10.35	Peak Not Found	piccolinov	10/18/13 05:57
Phenanthrene-d10	10.53	Peak Not Found	piccolinov	10/18/13 05:54
Phenanthrene	10.56	Peak Not Found	piccolinov	10/18/13 05:57
Anthracene	10.61	Peak Not Found	piccolinov	10/18/13 05:57
Carbazole	10.76	Peak Not Found	piccolinov	10/18/13 05:57
Di-n-butyl phthalate	11.05	Peak Not Found	piccolinov	10/18/13 05:57
Fluoranthene	11.87	Peak Not Found	piccolinov	10/18/13 05:58
3,3'-Dichlorobenzidine	14.02	Peak Not Found	piccolinov	10/18/13 05:58

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: 733 Analysis Batch Number: 87081

Lab Sample ID: 180-26012-1 MS Client Sample ID:

Date Analyzed: 10/17/13 15:04 Lab File ID: N1017008.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Perylene-d12	17.04	Poor Chromatography	piccolinov	10/18/13 05:54

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: 733 Analysis Batch Number: 87081

Lab Sample ID: 180-26012-1 MSD Client Sample ID: MB-MW-02-20131009 MSD

Date Analyzed: 10/17/13 15:31 Lab File ID: N1017009.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,2'-oxybis[1-chloropropane]	6.54	Poor Chromatography	piccolinov	10/18/13 05:59
Caprolactam	7.89	Peak Not Found	piccolinov	10/18/13 06:00
4,6-Dinitro-2-methylphenol	9.69	Peak Not Found	piccolinov	10/18/13 06:00
N-Nitrosodiphenylamine	9.74	Peak Not Found	piccolinov	10/18/13 06:00
2,4,6-Tribromophenol (Surr)	9.88	Peak Not Found	piccolinov	10/18/13 06:02
4-Bromophenyl phenyl ether	10.09	Peak Not Found	piccolinov	10/18/13 06:00
Hexachlorobenzene	10.18	Peak Not Found	piccolinov	10/18/13 06:00
Atrazine	10.23	Peak Not Found	piccolinov	10/18/13 06:01
Pentachlorophenol	10.35	Peak Not Found	piccolinov	10/18/13 06:01
Phenanthrene-d10	10.54	Peak Not Found	piccolinov	10/18/13 05:58
Phenanthrene	10.56	Peak Not Found	piccolinov	10/18/13 06:01
Anthracene	10.61	Peak Not Found	piccolinov	10/18/13 06:01
Carbazole	10.76	Peak Not Found	piccolinov	10/18/13 06:01
Di-n-butyl phthalate	11.05	Peak Not Found	piccolinov	10/18/13 06:02
Fluoranthene	11.87	Peak Not Found	piccolinov	10/18/13 06:02
3,3'-Dichlorobenzidine	14.00	Peak Not Found	piccolinov	10/18/13 06:02
Perylene-d12	17.04	Peak Not Found	piccolinov	10/18/13 05:59

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: 733 Analysis Batch Number: 87081

Lab Sample ID: 180-26012-2 Client Sample ID: MB-MW-01-20131009

Date Analyzed: 10/17/13 15:57 Lab File ID: N1017010.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Phenanthrene	10.56	Poor Chromatography	piccolino v	10/18/13 06:03
Anthracene	10.61	Poor Chromatography	piccolino v	10/18/13 06:03

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: 733 Analysis Batch Number: 87196

Lab Sample ID: CCVIS 180-87196/8 Client Sample ID:

Date Analyzed: 10/18/13 11:31 Lab File ID: N10180CC.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Pyridine	2.40	Poor Chromatography	piccolino v	10/18/13 12:25
Benzoic acid	7.26	Poor Chromatography	piccolino v	10/18/13 12:25

Lab Sample ID: LCS 180-86943/2-A Client Sample ID:

Date Analyzed: 10/18/13 12:48 Lab File ID: N1018003.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,2'-oxybis[1-chloropropane]	6.55	Poor Chromatography	piccolino v	10/19/13 05:46

Lab Sample ID: LCSD 180-86943/3-A Client Sample ID:

Date Analyzed: 10/18/13 13:14 Lab File ID: N1018004.D GC Column: Rxi-5SilMS ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,2'-oxybis[1-chloropropane]	6.53	Poor Chromatography	piccolino v	10/19/13 05:47

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: GC8 Analysis Batch Number: 86759

Lab Sample ID: IC 180-86759/1 Client Sample ID:

Date Analyzed: 10/14/13 15:33 Lab File ID: P1030400.D GC Column: RTX-1701 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Aroclor-1221		Poor Chromatography	guptaa	10/15/13 09:19
Aroclor-1254		Poor Chromatography	guptaa	10/15/13 09:01
PCB-1221 Peak 1	5.89	Poor Chromatography	guptaa	10/15/13 09:19
PCB-1221 Peak 2	6.75	Poor Chromatography	guptaa	10/15/13 09:19
PCB-1221 Peak 3	7.00	Poor Chromatography	guptaa	10/15/13 09:19
PCB-1254 Peak 1	9.71	Poor Chromatography	guptaa	10/15/13 09:01
PCB-1254 Peak 2	10.07	Poor Chromatography	guptaa	10/15/13 09:01
PCB-1254 Peak 3	10.63	Poor Chromatography	guptaa	10/15/13 09:01
PCB-1254 Peak 4	11.41	Poor Chromatography	guptaa	10/15/13 09:01
PCB-1254 Peak 5	11.97	Poor Chromatography	guptaa	10/15/13 09:01

Lab Sample ID: IC 180-86759/6 Client Sample ID:

Date Analyzed: 10/14/13 17:59 Lab File ID: P1030405.D GC Column: RTX-1701 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Aroclor-1242		Poor Chromatography	guptaa	10/15/13 09:02
PCB-1242 Peak 1	7.76	Poor Chromatography	guptaa	10/15/13 09:02
PCB-1242 Peak 2	8.44	Poor Chromatography	guptaa	10/15/13 09:02
PCB-1242 Peak 3	9.17	Poor Chromatography	guptaa	10/15/13 09:02
PCB-1242 Peak 4	9.58	Poor Chromatography	guptaa	10/15/13 09:02
PCB-1242 Peak 5	10.22	Poor Chromatography	guptaa	10/15/13 09:02

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: GC8 Analysis Batch Number: 86759

Lab Sample ID: IC 180-86759/11 Client Sample ID:

Date Analyzed: 10/14/13 20:25 Lab File ID: P1030410.D GC Column: RTX-1701 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Aroclor-1248		Unspecified	guptaa	10/15/13 09:04
PCB-1248 Peak 1	8.10	Unspecified	guptaa	10/15/13 09:04
PCB-1248 Peak 2	8.99	Unspecified	guptaa	10/15/13 09:04
PCB-1248 Peak 3	9.18	Unspecified	guptaa	10/15/13 09:04
PCB-1248 Peak 4	10.23	Unspecified	guptaa	10/15/13 09:04
PCB-1248 Peak 5	11.05	Unspecified	guptaa	10/15/13 09:04

Lab Sample ID: IC 180-86759/19 Client Sample ID:

Date Analyzed: 10/15/13 00:19 Lab File ID: P1030418.D GC Column: RTX-1701 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Aroclor-1016		Poor Chromatography	guptaa	10/15/13 09:10
PCB-1016 Peak 1	7.43	Poor Chromatography	guptaa	10/15/13 09:10
PCB-1016 Peak 2	8.09	Poor Chromatography	guptaa	10/15/13 09:10
PCB-1016 Peak 3	8.43	Poor Chromatography	guptaa	10/15/13 09:10
PCB-1016 Peak 4	8.98	Poor Chromatography	guptaa	10/15/13 09:10
PCB-1016 Peak 5	9.70	Poor Chromatography	guptaa	10/15/13 09:10

Lab Sample ID: IC 180-86759/20 Client Sample ID:

Date Analyzed: 10/15/13 00:48 Lab File ID: P1030419.D GC Column: RTX-1701 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Aroclor-1016		Poor Chromatography	guptaa	10/15/13 09:11
PCB-1016 Peak 1	7.43	Poor Chromatography	guptaa	10/15/13 09:11
PCB-1016 Peak 2	8.08	Poor Chromatography	guptaa	10/15/13 09:11
PCB-1016 Peak 3	8.43	Poor Chromatography	guptaa	10/15/13 09:11
PCB-1016 Peak 4	8.98	Poor Chromatography	guptaa	10/15/13 09:11
PCB-1016 Peak 5	9.70	Poor Chromatography	guptaa	10/15/13 09:11

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: GC8 Analysis Batch Number: 86759

Lab Sample ID: ICV 180-86759/26 Client Sample ID:

Date Analyzed: 10/15/13 03:43 Lab File ID: P1030425.D GC Column: RTX-1701 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1221		Unspecified	guptaa	
PCB-1221 Peak 1	5.87	Unspecified	guptaa	
PCB-1221 Peak 2	6.71	Unspecified	guptaa	
PCB-1221 Peak 3	6.95	Unspecified	guptaa	

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: GC8 Analysis Batch Number: 87359

Lab Sample ID: CCV 180-87359/7 Client Sample ID:

Date Analyzed: 10/17/13 17:33 Lab File ID: P1030547.D GC Column: RTX-1701 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1232		Poor Chromatography	guptaa	10/18/13 06:50
PCB-1232 Peak 1	6.72	Poor Chromatography	guptaa	10/18/13 06:50
PCB-1232 Peak 2	6.89	Poor Chromatography	guptaa	10/18/13 06:50
PCB-1232 Peak 3	8.21	Poor Chromatography	guptaa	10/18/13 06:50
PCB-1232 Peak 4	8.55	Poor Chromatography	guptaa	10/18/13 06:50
PCB-1232 Peak 5	9.70	Poor Chromatography	guptaa	10/18/13 06:50

Lab Sample ID: 180-26012-1 Client Sample ID: MB-MW-02-20131009

Date Analyzed: 10/19/13 23:25 Lab File ID: P1030657.D GC Column: RTX-1701 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrachloro-m-xylene	6.37	Unspecified	guptaa	10/21/13 07:54

Lab Sample ID: 180-26012-2 Client Sample ID: MB-MW-01-20131009

Date Analyzed: 10/21/13 10:24 Lab File ID: P1030721.D GC Column: RTX-1701 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrachloro-m-xylene	6.37	Unspecified	guptaa	10/21/13 12:27

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: GC8 Analysis Batch Number: 87359

Lab Sample ID: 180-26012-5 Client Sample ID: MB-MW-04-20131009

Date Analyzed: 10/21/13 10:54 Lab File ID: P1030722.D GC Column: RTX-1701 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1242		Poor Chromatography	guptaa	10/21/13 12:32
Aroclor-1242-1	7.72	Poor Chromatography	guptaa	10/21/13 12:32
Aroclor-1242-2	8.40	Poor Chromatography	guptaa	10/21/13 12:32
Aroclor-1242-3	9.15	Poor Chromatography	guptaa	10/21/13 12:32
Aroclor-1242-4	9.54	Poor Chromatography	guptaa	10/21/13 12:32
Aroclor-1242-5	10.06	Poor Chromatography	guptaa	10/21/13 12:32

Lab Sample ID: 180-26012-6 Client Sample ID: MB-MW-06-20131010

Date Analyzed: 10/21/13 11:23 Lab File ID: P1030723.D GC Column: RTX-1701 ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1242		Poor Chromatography	guptaa	10/21/13 12:29
Aroclor-1242-1	7.72	Poor Chromatography	guptaa	10/21/13 12:29
Aroclor-1242-2	8.41	Poor Chromatography	guptaa	10/21/13 12:29
Aroclor-1242-3	9.12	Poor Chromatography	guptaa	10/21/13 12:29
Aroclor-1242-4	9.54	Poor Chromatography	guptaa	10/21/13 12:29
Aroclor-1242-5	10.16	Poor Chromatography	guptaa	10/21/13 12:29

SAMPLE SUMMARY

Client: ENVIRON International Corp. Job Number: 180-26012-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
180-26012-1	MB-MW-02-20131009	Water	10/09/2013 1115	10/12/2013 0900
180-26012-1MS	MB-MW-02-20131009	Water	10/09/2013 1115	10/12/2013 0900
180-26012-1MSD	MB-MW-02-20131009	Water	10/09/2013 1115	10/12/2013 0900
180-26012-2	MB-MW-01-20131009	Water	10/09/2013 1300	10/12/2013 0900
180-26012-3	MB-MW-03-20131009	Water	10/09/2013 1405	10/12/2013 0900
180-26012-4	MB-EB-20131009	Water	10/09/2013 1530	10/12/2013 0900
180-26012-5	MB-MW-04-20131009	Water	10/09/2013 1052	10/12/2013 0900
180-26012-6	MB-MW-06-20131010	Water	10/10/2013 0810	10/12/2013 0900
180-26012-7	DUP-20131009	Water	10/09/2013 0000	10/12/2013 0900
180-26012-8	MB-MW-05-20131010	Water	10/10/2013 0955	10/12/2013 0900
180-26012-9	MB-EB-20131010	Water	10/10/2013 0900	10/12/2013 0900

EXECUTIVE SUMMARY - Detections

Client: ENVIRON International Corp. Job Number: 180-26012-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
180-26012-1	**MB-MW-02-20131009**					
Diethyl phthalate		97		9.7	ug/L	8270D
Naphthalene		1.2	J	1.9	ug/L	8270D
2,4-Dimethylphenol		150		9.7	ug/L	8270D
Caprolactam		42	J	49	ug/L	8270D
180-26012-2	**MB-MW-01-20131009**					
Acenaphthene		1.4	J	1.9	ug/L	8270D
Anthracene		0.35	J	1.9	ug/L	8270D
Carbazole		0.85	J	1.9	ug/L	8270D
Fluorene		0.51	J	1.9	ug/L	8270D
2-Methylnaphthalene		0.28	J	1.9	ug/L	8270D
Naphthalene		23		1.9	ug/L	8270D
Phenanthrene		0.42	J	1.9	ug/L	8270D
180-26012-3	**MB-MW-03-20131009**					
Acenaphthene		0.24	J	1.9	ug/L	8270D
Fluoranthene		0.37	J	1.9	ug/L	8270D
Caprolactam		15	J	48	ug/L	8270D
180-26012-5	**MB-MW-04-20131009**					
Acenaphthene		1.3	J	1.9	ug/L	8270D
Anthracene		0.35	J	1.9	ug/L	8270D
Fluorene		0.56	J	1.9	ug/L	8270D
PCB-1242		0.095		0.0094	ug/L	8082A
180-26012-6	**MB-MW-06-20131010**					
Acenaphthene		1.7	J	1.9	ug/L	8270D
PCB-1242		0.015		0.0094	ug/L	8082A
180-26012-7	**DUP-20131009**					
Acenaphthene		3.5		1.9	ug/L	8270D
Anthracene		0.53	J	1.9	ug/L	8270D
Fluorene		1.8	J	1.9	ug/L	8270D

EXECUTIVE SUMMARY - Detections

Client: ENVIRON International Corp. Job Number: 180-26012-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
180-26012-8	**MB-MW-05-20131010**					
Acenaphthene		59		1.9	ug/L	8270D
Acenaphthylene		2.0		1.9	ug/L	8270D
Anthracene		5.5		1.9	ug/L	8270D
Carbazole		44		1.9	ug/L	8270D
Dibenzofuran		33		9.6	ug/L	8270D
Fluoranthene		7.5		1.9	ug/L	8270D
Fluorene		41		1.9	ug/L	8270D
2-Methylnaphthalene		44		1.9	ug/L	8270D
Naphthalene		270		1.9	ug/L	8270D
Phenanthrene		42		1.9	ug/L	8270D
Pyrene		3.4		1.9	ug/L	8270D
2,4-Dimethylphenol		67		9.6	ug/L	8270D
1,1'-Biphenyl		9.3	J	9.6	ug/L	8270D

METHOD SUMMARY

Client: ENVIRON International Corp. Job Number: 180-26012-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Semivolatile Organic Compounds (GC/MS)	TAL PIT	SW846 8270D	
Liquid-Liquid Extraction (Continuous)	TAL PIT		SW846 3520C
Polychlorinated Biphenyls (PCBs) (GC)	TAL PIT	SW846 8082A	
Liquid-Liquid Extraction (Separatory Funnel)	TAL PIT		SW846 3510C
Sulfur Cleanup	TAL PIT		SW846 3660B

Lab References:

TAL PIT = TestAmerica Pittsburgh

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: ENVIRON International Corp. Job Number: 180-26012-1

Method	Analyst	Analyst ID
SW846 8270D	Piccolino, Vincent	VVP
SW846 8082A	Gupta, Ashok	AKG

Client: ENVIRON International Corp. Job Number: 180-26012-1

Client Sample ID: **MB-MW-02-20131009**

Lab Sample ID: 180-26012-1 Date Sampled: 10/09/2013 1115
Client Matrix: Water Date Received: 10/12/2013 0900

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	180-87081	Instrument ID:	733
Prep Method:	3520C	Prep Batch:	180-86837	Lab File ID:	N1017007.D
Dilution:	1.0			Initial Weight/Volume:	1030 mL
Analysis Date:	10/17/2013 1412			Final Weight/Volume:	10.0 mL
Prep Date:	10/16/2013 0907			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.14	1.9
Acenaphthylene	ND		0.15	1.9
Anthracene	ND		0.15	1.9
Benzo[a]anthracene	ND		0.14	1.9
Benzo[a]pyrene	ND		0.13	1.9
Benzo[b]fluoranthene	ND		0.15	1.9
Benzo[g,h,i]perylene	ND		0.15	1.9
Benzo[k]fluoranthene	ND		0.53	1.9
Bis(2-ethylhexyl) phthalate	ND		12	19
2,2'-oxybis[1-chloropropane]	ND		0.19	1.9
4-Bromophenyl phenyl ether	ND		0.62	9.7
Butyl benzyl phthalate	ND		1.4	9.7
Carbazole	ND		0.15	1.9
4-Chloroaniline	ND		0.86	9.7
2-Chloronaphthalene	ND		0.15	1.9
4-Chlorophenyl phenyl ether	ND		0.49	9.7
Chrysene	ND		0.14	1.9
Dibenz(a,h)anthracene	ND		0.15	1.9
Dibenzofuran	ND		0.60	9.7
Di-n-butyl phthalate	ND		1.2	9.7
3,3'-Dichlorobenzidine	ND		1.1	9.7
Diethyl phthalate	97		1.4	9.7
Dimethyl phthalate	ND		0.74	9.7
2,4-Dinitrotoluene	ND		0.52	9.7
2,6-Dinitrotoluene	ND		0.77	9.7
Di-n-octyl phthalate	ND		2.0	9.7
Fluoranthene	ND		0.16	1.9
Fluorene	ND		0.21	1.9
Hexachlorobenzene	ND		0.18	1.9
Hexachlorobutadiene	ND		0.16	1.9
Hexachlorocyclopentadiene	ND		0.50	9.7
Hexachloroethane	ND		0.61	9.7
Indeno[1,2,3-cd]pyrene	ND		0.19	1.9
Isophorone	ND		0.63	9.7
2-Methylnaphthalene	ND		0.12	1.9
Naphthalene	1.2	J	0.14	1.9
2-Nitroaniline	ND		3.4	49
3-Nitroaniline	ND		3.1	49
4-Nitroaniline	ND		1.7	49
4-Nitrophenol	ND		6.3	49
Nitrobenzene	ND		0.82	19
N-Nitrosodi-n-propylamine	ND		0.30	1.9
N-Nitrosodiphenylamine	ND		0.83	9.7
Phenanthrene	ND		0.41	1.9
Pyrene	ND		0.15	1.9
4-Chloro-3-methylphenol	ND		0.73	9.7

Client: ENVIRON International Corp. Job Number: 180-26012-1

Client Sample ID: **MB-MW-02-20131009**

Lab Sample ID: 180-26012-1 Date Sampled: 10/09/2013 1115
Client Matrix: Water Date Received: 10/12/2013 0900

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	180-87081	Instrument ID:	733
Prep Method:	3520C	Prep Batch:	180-86837	Lab File ID:	N1017007.D
Dilution:	1.0			Initial Weight/Volume:	1030 mL
Analysis Date:	10/17/2013 1412			Final Weight/Volume:	10.0 mL
Prep Date:	10/16/2013 0907			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
2-Chlorophenol	ND		1.6	9.7
2-Methylphenol	ND		0.84	9.7
Methylphenol, 3 & 4	ND		0.88	9.7
2,4-Dichlorophenol	ND		0.32	1.9
2,4-Dimethylphenol	150		0.83	9.7
2,4-Dinitrophenol	ND		6.0	49
4,6-Dinitro-2-methylphenol	ND		2.1	49
2-Nitrophenol	ND		1.7	9.7
Pentachlorophenol	ND		0.64	9.7
Phenol	ND		0.56	1.9
2,4,5-Trichlorophenol	ND		1.5	9.7
2,4,6-Trichlorophenol	ND		1.7	9.7
Acetophenone	ND		0.78	9.7
Atrazine	ND		0.87	9.7
Benzaldehyde	ND		1.5	9.7
1,1'-Biphenyl	ND		0.40	9.7
Caprolactam	42	J	12	49
Bis(2-chloroethoxy)methane	ND		0.56	9.7
Bis(2-chloroethyl)ether	ND		0.24	1.9

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5 (Surr)	57		37 - 104
Phenol-d5 (Surr)	52		30 - 102
2-Fluorobiphenyl	51		35 - 108
2,4,6-Tribromophenol (Surr)	70		33 - 122
2-Fluorophenol (Surr)	52		26 - 100
Terphenyl-d14 (Surr)	36		25 - 130

Client: ENVIRON International Corp. Job Number: 180-26012-1

Client Sample ID: **MB-MW-01-20131009**

Lab Sample ID: 180-26012-2 Date Sampled: 10/09/2013 1300
Client Matrix: Water Date Received: 10/12/2013 0900

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	180-87081	Instrument ID:	733
Prep Method:	3520C	Prep Batch:	180-86837	Lab File ID:	N1017010.D
Dilution:	1.0			Initial Weight/Volume:	1040 mL
Analysis Date:	10/17/2013 1557			Final Weight/Volume:	10.0 mL
Prep Date:	10/16/2013 0907			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	1.4	J	0.14	1.9
Acenaphthylene	ND		0.15	1.9
Anthracene	0.35	J	0.15	1.9
Benzo[a]anthracene	ND		0.14	1.9
Benzo[a]pyrene	ND		0.13	1.9
Benzo[b]fluoranthene	ND		0.15	1.9
Benzo[g,h,i]perylene	ND		0.15	1.9
Benzo[k]fluoranthene	ND		0.53	1.9
Bis(2-ethylhexyl) phthalate	ND		12	19
2,2'-oxybis[1-chloropropane]	ND		0.19	1.9
4-Bromophenyl phenyl ether	ND		0.61	9.6
Butyl benzyl phthalate	ND		1.4	9.6
Carbazole	0.85	J	0.15	1.9
4-Chloroaniline	ND		0.85	9.6
2-Chloronaphthalene	ND		0.15	1.9
4-Chlorophenyl phenyl ether	ND		0.48	9.6
Chrysene	ND		0.13	1.9
Dibenz(a,h)anthracene	ND		0.15	1.9
Dibenzofuran	ND		0.59	9.6
Di-n-butyl phthalate	ND		1.2	9.6
3,3'-Dichlorobenzidine	ND		1.1	9.6
Diethyl phthalate	ND		1.4	9.6
Dimethyl phthalate	ND		0.74	9.6
2,4-Dinitrotoluene	ND		0.52	9.6
2,6-Dinitrotoluene	ND		0.77	9.6
Di-n-octyl phthalate	ND		2.0	9.6
Fluoranthene	ND		0.16	1.9
Fluorene	0.51	J	0.21	1.9
Hexachlorobenzene	ND		0.18	1.9
Hexachlorobutadiene	ND		0.16	1.9
Hexachlorocyclopentadiene	ND		0.50	9.6
Hexachloroethane	ND		0.60	9.6
Indeno[1,2,3-cd]pyrene	ND		0.19	1.9
Isophorone	ND		0.62	9.6
2-Methylnaphthalene	0.28	J	0.12	1.9
Naphthalene	23		0.13	1.9
2-Nitroaniline	ND		3.4	48
3-Nitroaniline	ND		3.1	48
4-Nitroaniline	ND		1.7	48
4-Nitrophenol	ND		6.2	48
Nitrobenzene	ND		0.81	19
N-Nitrosodi-n-propylamine	ND		0.30	1.9
N-Nitrosodiphenylamine	ND		0.82	9.6
Phenanthrene	0.42	J	0.41	1.9
Pyrene	ND		0.15	1.9
4-Chloro-3-methylphenol	ND		0.73	9.6

Client: ENVIRON International Corp. Job Number: 180-26012-1

Client Sample ID: **MB-MW-01-20131009**

Lab Sample ID: 180-26012-2 Date Sampled: 10/09/2013 1300
Client Matrix: Water Date Received: 10/12/2013 0900

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	180-87081	Instrument ID:	733
Prep Method:	3520C	Prep Batch:	180-86837	Lab File ID:	N1017010.D
Dilution:	1.0			Initial Weight/Volume:	1040 mL
Analysis Date:	10/17/2013 1557			Final Weight/Volume:	10.0 mL
Prep Date:	10/16/2013 0907			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
2-Chlorophenol	ND		1.6	9.6
2-Methylphenol	ND		0.83	9.6
Methylphenol, 3 & 4	ND		0.87	9.6
2,4-Dichlorophenol	ND		0.32	1.9
2,4-Dimethylphenol	ND		0.82	9.6
2,4-Dinitrophenol	ND		5.9	48
4,6-Dinitro-2-methylphenol	ND		2.1	48
2-Nitrophenol	ND		1.6	9.6
Pentachlorophenol	ND		0.64	9.6
Phenol	ND		0.56	1.9
2,4,5-Trichlorophenol	ND		1.5	9.6
2,4,6-Trichlorophenol	ND		1.7	9.6
Acetophenone	ND		0.77	9.6
Atrazine	ND		0.86	9.6
Benzaldehyde	ND		1.4	9.6
1,1'-Biphenyl	ND		0.40	9.6
Caprolactam	ND		11	48
Bis(2-chloroethoxy)methane	ND		0.56	9.6
Bis(2-chloroethyl)ether	ND		0.24	1.9

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5 (Surr)	52		37 - 104
Phenol-d5 (Surr)	38		30 - 102
2-Fluorobiphenyl	56		35 - 108
2,4,6-Tribromophenol (Surr)	67		33 - 122
2-Fluorophenol (Surr)	42		26 - 100
Terphenyl-d14 (Surr)	37		25 - 130

Client: ENVIRON International Corp. Job Number: 180-26012-1

Client Sample ID: **MB-MW-03-20131009**

Lab Sample ID: 180-26012-3 Date Sampled: 10/09/2013 1405
Client Matrix: Water Date Received: 10/12/2013 0900

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	180-87081	Instrument ID:	733
Prep Method:	3520C	Prep Batch:	180-86837	Lab File ID:	N1017011.D
Dilution:	1.0			Initial Weight/Volume:	1040 mL
Analysis Date:	10/17/2013 1623			Final Weight/Volume:	10.0 mL
Prep Date:	10/16/2013 0907			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	0.24	J	0.14	1.9
Acenaphthylene	ND		0.15	1.9
Anthracene	ND		0.15	1.9
Benzo[a]anthracene	ND		0.14	1.9
Benzo[a]pyrene	ND		0.13	1.9
Benzo[b]fluoranthene	ND		0.15	1.9
Benzo[g,h,i]perylene	ND		0.15	1.9
Benzo[k]fluoranthene	ND		0.53	1.9
Bis(2-ethylhexyl) phthalate	ND		12	19
2,2'-oxybis[1-chloropropane]	ND		0.19	1.9
4-Bromophenyl phenyl ether	ND		0.61	9.6
Butyl benzyl phthalate	ND		1.4	9.6
Carbazole	ND		0.15	1.9
4-Chloroaniline	ND		0.85	9.6
2-Chloronaphthalene	ND		0.15	1.9
4-Chlorophenyl phenyl ether	ND		0.48	9.6
Chrysene	ND		0.13	1.9
Dibenz(a,h)anthracene	ND		0.15	1.9
Dibenzofuran	ND		0.59	9.6
Di-n-butyl phthalate	ND		1.2	9.6
3,3'-Dichlorobenzidine	ND		1.1	9.6
Diethyl phthalate	ND		1.4	9.6
Dimethyl phthalate	ND		0.74	9.6
2,4-Dinitrotoluene	ND		0.52	9.6
2,6-Dinitrotoluene	ND		0.77	9.6
Di-n-octyl phthalate	ND		2.0	9.6
Fluoranthene	0.37	J	0.16	1.9
Fluorene	ND		0.21	1.9
Hexachlorobenzene	ND		0.18	1.9
Hexachlorobutadiene	ND		0.16	1.9
Hexachlorocyclopentadiene	ND		0.50	9.6
Hexachloroethane	ND		0.60	9.6
Indeno[1,2,3-cd]pyrene	ND		0.19	1.9
Isophorone	ND		0.62	9.6
2-Methylnaphthalene	ND		0.12	1.9
Naphthalene	ND		0.13	1.9
2-Nitroaniline	ND		3.4	48
3-Nitroaniline	ND		3.1	48
4-Nitroaniline	ND		1.7	48
4-Nitrophenol	ND		6.2	48
Nitrobenzene	ND		0.81	19
N-Nitrosodi-n-propylamine	ND		0.30	1.9
N-Nitrosodiphenylamine	ND		0.82	9.6
Phenanthrene	ND		0.41	1.9
Pyrene	ND		0.15	1.9
4-Chloro-3-methylphenol	ND		0.73	9.6

Client: ENVIRON International Corp. Job Number: 180-26012-1

Client Sample ID: **MB-MW-03-20131009**

Lab Sample ID: 180-26012-3 Date Sampled: 10/09/2013 1405
Client Matrix: Water Date Received: 10/12/2013 0900

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	180-87081	Instrument ID:	733
Prep Method:	3520C	Prep Batch:	180-86837	Lab File ID:	N1017011.D
Dilution:	1.0			Initial Weight/Volume:	1040 mL
Analysis Date:	10/17/2013 1623			Final Weight/Volume:	10.0 mL
Prep Date:	10/16/2013 0907			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
2-Chlorophenol	ND		1.6	9.6
2-Methylphenol	ND		0.83	9.6
Methylphenol, 3 & 4	ND		0.87	9.6
2,4-Dichlorophenol	ND		0.32	1.9
2,4-Dimethylphenol	ND		0.82	9.6
2,4-Dinitrophenol	ND		5.9	48
4,6-Dinitro-2-methylphenol	ND		2.1	48
2-Nitrophenol	ND		1.6	9.6
Pentachlorophenol	ND		0.64	9.6
Phenol	ND		0.56	1.9
2,4,5-Trichlorophenol	ND		1.5	9.6
2,4,6-Trichlorophenol	ND		1.7	9.6
Acetophenone	ND		0.77	9.6
Atrazine	ND		0.86	9.6
Benzaldehyde	ND		1.4	9.6
1,1'-Biphenyl	ND		0.40	9.6
Caprolactam	15	J	11	48
Bis(2-chloroethoxy)methane	ND		0.56	9.6
Bis(2-chloroethyl)ether	ND		0.24	1.9

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5 (Surr)	55		37 - 104
Phenol-d5 (Surr)	43		30 - 102
2-Fluorobiphenyl	57		35 - 108
2,4,6-Tribromophenol (Surr)	63		33 - 122
2-Fluorophenol (Surr)	46		26 - 100
Terphenyl-d14 (Surr)	36		25 - 130

Client: ENVIRON International Corp. Job Number: 180-26012-1

Client Sample ID: **MB-EB-20131009**

Lab Sample ID: 180-26012-4 Date Sampled: 10/09/2013 1530
Client Matrix: Water Date Received: 10/12/2013 0900

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	180-87081	Instrument ID:	733
Prep Method:	3520C	Prep Batch:	180-86837	Lab File ID:	N1017012.D
Dilution:	1.0			Initial Weight/Volume:	1050 mL
Analysis Date:	10/17/2013 1649			Final Weight/Volume:	10.0 mL
Prep Date:	10/16/2013 0907			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.14	1.9
Acenaphthylene	ND		0.14	1.9
Anthracene	ND		0.15	1.9
Benzo[a]anthracene	ND		0.14	1.9
Benzo[a]pyrene	ND		0.13	1.9
Benzo[b]fluoranthene	ND		0.15	1.9
Benzo[g,h,i]perylene	ND		0.14	1.9
Benzo[k]fluoranthene	ND		0.52	1.9
Bis(2-ethylhexyl) phthalate	ND		12	19
2,2'-oxybis[1-chloropropane]	ND		0.19	1.9
4-Bromophenyl phenyl ether	ND		0.60	9.5
Butyl benzyl phthalate	ND		1.4	9.5
Carbazole	ND		0.15	1.9
4-Chloroaniline	ND		0.84	9.5
2-Chloronaphthalene	ND		0.14	1.9
4-Chlorophenyl phenyl ether	ND		0.48	9.5
Chrysene	ND		0.13	1.9
Dibenz(a,h)anthracene	ND		0.15	1.9
Dibenzofuran	ND		0.59	9.5
Di-n-butyl phthalate	ND		1.2	9.5
3,3'-Dichlorobenzidine	ND		1.1	9.5
Diethyl phthalate	ND		1.4	9.5
Dimethyl phthalate	ND		0.73	9.5
2,4-Dinitrotoluene	ND		0.51	9.5
2,6-Dinitrotoluene	ND		0.76	9.5
Di-n-octyl phthalate	ND		2.0	9.5
Fluoranthene	ND		0.15	1.9
Fluorene	ND		0.21	1.9
Hexachlorobenzene	ND		0.17	1.9
Hexachlorobutadiene	ND		0.16	1.9
Hexachlorocyclopentadiene	ND		0.49	9.5
Hexachloroethane	ND		0.60	9.5
Indeno[1,2,3-cd]pyrene	ND		0.19	1.9
Isophorone	ND		0.61	9.5
2-Methylnaphthalene	ND		0.12	1.9
Naphthalene	ND		0.13	1.9
2-Nitroaniline	ND		3.3	48
3-Nitroaniline	ND		3.1	48
4-Nitroaniline	ND		1.6	48
4-Nitrophenol	ND		6.2	48
Nitrobenzene	ND		0.80	19
N-Nitrosodi-n-propylamine	ND		0.29	1.9
N-Nitrosodiphenylamine	ND		0.81	9.5
Phenanthrene	ND		0.41	1.9
Pyrene	ND		0.15	1.9
4-Chloro-3-methylphenol	ND		0.72	9.5

Client: ENVIRON International Corp. Job Number: 180-26012-1

Client Sample ID: **MB-EB-20131009**

Lab Sample ID: 180-26012-4 Date Sampled: 10/09/2013 1530
Client Matrix: Water Date Received: 10/12/2013 0900

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	180-87081	Instrument ID:	733
Prep Method:	3520C	Prep Batch:	180-86837	Lab File ID:	N1017012.D
Dilution:	1.0			Initial Weight/Volume:	1050 mL
Analysis Date:	10/17/2013 1649			Final Weight/Volume:	10.0 mL
Prep Date:	10/16/2013 0907			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
2-Chlorophenol	ND		1.6	9.5
2-Methylphenol	ND		0.82	9.5
Methylphenol, 3 & 4	ND		0.86	9.5
2,4-Dichlorophenol	ND		0.32	1.9
2,4-Dimethylphenol	ND		0.81	9.5
2,4-Dinitrophenol	ND		5.8	48
4,6-Dinitro-2-methylphenol	ND		2.1	48
2-Nitrophenol	ND		1.6	9.5
Pentachlorophenol	ND		0.63	9.5
Phenol	ND		0.55	1.9
2,4,5-Trichlorophenol	ND		1.5	9.5
2,4,6-Trichlorophenol	ND		1.7	9.5
Acetophenone	ND		0.76	9.5
Atrazine	ND		0.85	9.5
Benzaldehyde	ND		1.4	9.5
1,1'-Biphenyl	ND		0.40	9.5
Caprolactam	ND		11	48
Bis(2-chloroethoxy)methane	ND		0.55	9.5
Bis(2-chloroethyl)ether	ND		0.24	1.9

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5 (Surr)	55		37 - 104
Phenol-d5 (Surr)	47		30 - 102
2-Fluorobiphenyl	57		35 - 108
2,4,6-Tribromophenol (Surr)	61		33 - 122
2-Fluorophenol (Surr)	49		26 - 100
Terphenyl-d14 (Surr)	65		25 - 130

Client: ENVIRON International Corp. Job Number: 180-26012-1

Client Sample ID: **MB-MW-04-20131009**

Lab Sample ID: 180-26012-5 Date Sampled: 10/09/2013 1052
Client Matrix: Water Date Received: 10/12/2013 0900

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	180-87081	Instrument ID:	733
Prep Method:	3520C	Prep Batch:	180-86837	Lab File ID:	N1017013.D
Dilution:	1.0			Initial Weight/Volume:	1040 mL
Analysis Date:	10/17/2013 1715			Final Weight/Volume:	10.0 mL
Prep Date:	10/16/2013 0907			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	1.3	J	0.14	1.9
Acenaphthylene	ND		0.15	1.9
Anthracene	0.35	J	0.15	1.9
Benzo[a]anthracene	ND		0.14	1.9
Benzo[a]pyrene	ND		0.13	1.9
Benzo[b]fluoranthene	ND		0.15	1.9
Benzo[g,h,i]perylene	ND		0.15	1.9
Benzo[k]fluoranthene	ND		0.53	1.9
Bis(2-ethylhexyl) phthalate	ND		12	19
2,2'-oxybis[1-chloropropane]	ND		0.19	1.9
4-Bromophenyl phenyl ether	ND		0.61	9.6
Butyl benzyl phthalate	ND		1.4	9.6
Carbazole	ND		0.15	1.9
4-Chloroaniline	ND		0.85	9.6
2-Chloronaphthalene	ND		0.15	1.9
4-Chlorophenyl phenyl ether	ND		0.48	9.6
Chrysene	ND		0.13	1.9
Dibenz(a,h)anthracene	ND		0.15	1.9
Dibenzofuran	ND		0.59	9.6
Di-n-butyl phthalate	ND		1.2	9.6
3,3'-Dichlorobenzidine	ND		1.1	9.6
Diethyl phthalate	ND		1.4	9.6
Dimethyl phthalate	ND		0.74	9.6
2,4-Dinitrotoluene	ND		0.52	9.6
2,6-Dinitrotoluene	ND		0.77	9.6
Di-n-octyl phthalate	ND		2.0	9.6
Fluoranthene	ND		0.16	1.9
Fluorene	0.56	J	0.21	1.9
Hexachlorobenzene	ND		0.18	1.9
Hexachlorobutadiene	ND		0.16	1.9
Hexachlorocyclopentadiene	ND		0.50	9.6
Hexachloroethane	ND		0.60	9.6
Indeno[1,2,3-cd]pyrene	ND		0.19	1.9
Isophorone	ND		0.62	9.6
2-Methylnaphthalene	ND		0.12	1.9
Naphthalene	ND		0.13	1.9
2-Nitroaniline	ND		3.4	48
3-Nitroaniline	ND		3.1	48
4-Nitroaniline	ND		1.7	48
4-Nitrophenol	ND		6.2	48
Nitrobenzene	ND		0.81	19
N-Nitrosodi-n-propylamine	ND		0.30	1.9
N-Nitrosodiphenylamine	ND		0.82	9.6
Phenanthrene	ND		0.41	1.9
Pyrene	ND		0.15	1.9
4-Chloro-3-methylphenol	ND		0.73	9.6

Client: ENVIRON International Corp. Job Number: 180-26012-1

Client Sample ID: **MB-MW-04-20131009**

Lab Sample ID: 180-26012-5 Date Sampled: 10/09/2013 1052
Client Matrix: Water Date Received: 10/12/2013 0900

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	180-87081	Instrument ID:	733
Prep Method:	3520C	Prep Batch:	180-86837	Lab File ID:	N1017013.D
Dilution:	1.0			Initial Weight/Volume:	1040 mL
Analysis Date:	10/17/2013 1715			Final Weight/Volume:	10.0 mL
Prep Date:	10/16/2013 0907			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
2-Chlorophenol	ND		1.6	9.6
2-Methylphenol	ND		0.83	9.6
Methylphenol, 3 & 4	ND		0.87	9.6
2,4-Dichlorophenol	ND		0.32	1.9
2,4-Dimethylphenol	ND		0.82	9.6
2,4-Dinitrophenol	ND		5.9	48
4,6-Dinitro-2-methylphenol	ND		2.1	48
2-Nitrophenol	ND		1.6	9.6
Pentachlorophenol	ND		0.64	9.6
Phenol	ND		0.56	1.9
2,4,5-Trichlorophenol	ND		1.5	9.6
2,4,6-Trichlorophenol	ND		1.7	9.6
Acetophenone	ND		0.77	9.6
Atrazine	ND		0.86	9.6
Benzaldehyde	ND		1.4	9.6
1,1'-Biphenyl	ND		0.40	9.6
Caprolactam	ND		11	48
Bis(2-chloroethoxy)methane	ND		0.56	9.6
Bis(2-chloroethyl)ether	ND		0.24	1.9

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5 (Surr)	54		37 - 104
Phenol-d5 (Surr)	43		30 - 102
2-Fluorobiphenyl	59		35 - 108
2,4,6-Tribromophenol (Surr)	71		33 - 122
2-Fluorophenol (Surr)	46		26 - 100
Terphenyl-d14 (Surr)	36		25 - 130

Client: ENVIRON International Corp. Job Number: 180-26012-1

Client Sample ID: **MB-MW-06-20131010**

Lab Sample ID: 180-26012-6 Date Sampled: 10/10/2013 0810
Client Matrix: Water Date Received: 10/12/2013 0900

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	180-87196	Instrument ID:	733
Prep Method:	3520C	Prep Batch:	180-86943	Lab File ID:	N1018005.D
Dilution:	1.0			Initial Weight/Volume:	1030 mL
Analysis Date:	10/18/2013 1432			Final Weight/Volume:	10.0 mL
Prep Date:	10/17/2013 0631			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	1.7	J	0.14	1.9
Acenaphthylene	ND		0.15	1.9
Anthracene	ND		0.15	1.9
Benzo[a]anthracene	ND		0.14	1.9
Benzo[a]pyrene	ND		0.13	1.9
Benzo[b]fluoranthene	ND		0.15	1.9
Benzo[g,h,i]perylene	ND		0.15	1.9
Benzo[k]fluoranthene	ND		0.53	1.9
Bis(2-ethylhexyl) phthalate	ND		12	19
2,2'-oxybis[1-chloropropane]	ND		0.19	1.9
4-Bromophenyl phenyl ether	ND		0.62	9.7
Butyl benzyl phthalate	ND		1.4	9.7
Carbazole	ND		0.15	1.9
4-Chloroaniline	ND		0.86	9.7
2-Chloronaphthalene	ND		0.15	1.9
4-Chlorophenyl phenyl ether	ND		0.49	9.7
Chrysene	ND		0.14	1.9
Dibenz(a,h)anthracene	ND		0.15	1.9
Dibenzofuran	ND		0.60	9.7
Di-n-butyl phthalate	ND		1.2	9.7
3,3'-Dichlorobenzidine	ND		1.1	9.7
Diethyl phthalate	ND		1.4	9.7
Dimethyl phthalate	ND		0.74	9.7
2,4-Dinitrotoluene	ND		0.52	9.7
2,6-Dinitrotoluene	ND		0.77	9.7
Di-n-octyl phthalate	ND		2.0	9.7
Fluoranthene	ND		0.16	1.9
Fluorene	ND		0.21	1.9
Hexachlorobenzene	ND		0.18	1.9
Hexachlorobutadiene	ND		0.16	1.9
Hexachlorocyclopentadiene	ND		0.50	9.7
Hexachloroethane	ND		0.61	9.7
Indeno[1,2,3-cd]pyrene	ND		0.19	1.9
Isophorone	ND		0.63	9.7
2-Methylnaphthalene	ND		0.12	1.9
Naphthalene	ND		0.14	1.9
2-Nitroaniline	ND		3.4	49
3-Nitroaniline	ND		3.1	49
4-Nitroaniline	ND		1.7	49
4-Nitrophenol	ND		6.3	49
Nitrobenzene	ND		0.82	19
N-Nitrosodi-n-propylamine	ND		0.30	1.9
N-Nitrosodiphenylamine	ND		0.83	9.7
Phenanthrene	ND		0.41	1.9
Pyrene	ND		0.15	1.9
4-Chloro-3-methylphenol	ND		0.73	9.7

Client: ENVIRON International Corp. Job Number: 180-26012-1

Client Sample ID: **MB-MW-06-20131010**

Lab Sample ID: 180-26012-6 Date Sampled: 10/10/2013 0810
Client Matrix: Water Date Received: 10/12/2013 0900

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	180-87196	Instrument ID:	733
Prep Method:	3520C	Prep Batch:	180-86943	Lab File ID:	N1018005.D
Dilution:	1.0			Initial Weight/Volume:	1030 mL
Analysis Date:	10/18/2013 1432			Final Weight/Volume:	10.0 mL
Prep Date:	10/17/2013 0631			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
2-Chlorophenol	ND		1.6	9.7
2-Methylphenol	ND		0.84	9.7
Methylphenol, 3 & 4	ND		0.88	9.7
2,4-Dichlorophenol	ND		0.32	1.9
2,4-Dimethylphenol	ND		0.83	9.7
2,4-Dinitrophenol	ND		6.0	49
4,6-Dinitro-2-methylphenol	ND		2.1	49
2-Nitrophenol	ND		1.7	9.7
Pentachlorophenol	ND		0.64	9.7
Phenol	ND		0.56	1.9
2,4,5-Trichlorophenol	ND		1.5	9.7
2,4,6-Trichlorophenol	ND		1.7	9.7
Acetophenone	ND		0.78	9.7
Atrazine	ND		0.87	9.7
Benzaldehyde	ND		1.5	9.7
1,1'-Biphenyl	ND		0.40	9.7
Caprolactam	ND		12	49
Bis(2-chloroethoxy)methane	ND		0.56	9.7
Bis(2-chloroethyl)ether	ND		0.24	1.9

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5 (Surr)	48		37 - 104
Phenol-d5 (Surr)	34		30 - 102
2-Fluorobiphenyl	52		35 - 108
2,4,6-Tribromophenol (Surr)	63		33 - 122
2-Fluorophenol (Surr)	39		26 - 100
Terphenyl-d14 (Surr)	29		25 - 130

Client: ENVIRON International Corp. Job Number: 180-26012-1

Client Sample ID: **DUP-20131009**

Lab Sample ID: 180-26012-7 Date Sampled: 10/09/2013 0000
Client Matrix: Water Date Received: 10/12/2013 0900

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	180-87081	Instrument ID:	733
Prep Method:	3520C	Prep Batch:	180-86837	Lab File ID:	N1017014.D
Dilution:	1.0			Initial Weight/Volume:	1040 mL
Analysis Date:	10/17/2013 1741			Final Weight/Volume:	10.0 mL
Prep Date:	10/16/2013 0907			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	3.5		0.14	1.9
Acenaphthylene	ND		0.15	1.9
Anthracene	0.53	J	0.15	1.9
Benzo[a]anthracene	ND		0.14	1.9
Benzo[a]pyrene	ND		0.13	1.9
Benzo[b]fluoranthene	ND		0.15	1.9
Benzo[g,h,i]perylene	ND		0.15	1.9
Benzo[k]fluoranthene	ND		0.53	1.9
Bis(2-ethylhexyl) phthalate	ND		12	19
2,2'-oxybis[1-chloropropane]	ND		0.19	1.9
4-Bromophenyl phenyl ether	ND		0.61	9.6
Butyl benzyl phthalate	ND		1.4	9.6
Carbazole	ND		0.15	1.9
4-Chloroaniline	ND		0.85	9.6
2-Chloronaphthalene	ND		0.15	1.9
4-Chlorophenyl phenyl ether	ND		0.48	9.6
Chrysene	ND		0.13	1.9
Dibenz(a,h)anthracene	ND		0.15	1.9
Dibenzofuran	ND		0.59	9.6
Di-n-butyl phthalate	ND		1.2	9.6
3,3'-Dichlorobenzidine	ND		1.1	9.6
Diethyl phthalate	ND		1.4	9.6
Dimethyl phthalate	ND		0.74	9.6
2,4-Dinitrotoluene	ND		0.52	9.6
2,6-Dinitrotoluene	ND		0.77	9.6
Di-n-octyl phthalate	ND		2.0	9.6
Fluoranthene	ND		0.16	1.9
Fluorene	1.8	J	0.21	1.9
Hexachlorobenzene	ND		0.18	1.9
Hexachlorobutadiene	ND		0.16	1.9
Hexachlorocyclopentadiene	ND		0.50	9.6
Hexachloroethane	ND		0.60	9.6
Indeno[1,2,3-cd]pyrene	ND		0.19	1.9
Isophorone	ND		0.62	9.6
2-Methylnaphthalene	ND		0.12	1.9
Naphthalene	ND		0.13	1.9
2-Nitroaniline	ND		3.4	48
3-Nitroaniline	ND		3.1	48
4-Nitroaniline	ND		1.7	48
4-Nitrophenol	ND		6.2	48
Nitrobenzene	ND		0.81	19
N-Nitrosodi-n-propylamine	ND		0.30	1.9
N-Nitrosodiphenylamine	ND		0.82	9.6
Phenanthrene	ND		0.41	1.9
Pyrene	ND		0.15	1.9
4-Chloro-3-methylphenol	ND		0.73	9.6

Client: ENVIRON International Corp. Job Number: 180-26012-1

Client Sample ID: **DUP-20131009**

Lab Sample ID: 180-26012-7 Date Sampled: 10/09/2013 0000
Client Matrix: Water Date Received: 10/12/2013 0900

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	180-87081	Instrument ID:	733
Prep Method:	3520C	Prep Batch:	180-86837	Lab File ID:	N1017014.D
Dilution:	1.0			Initial Weight/Volume:	1040 mL
Analysis Date:	10/17/2013 1741			Final Weight/Volume:	10.0 mL
Prep Date:	10/16/2013 0907			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
2-Chlorophenol	ND		1.6	9.6
2-Methylphenol	ND		0.83	9.6
Methylphenol, 3 & 4	ND		0.87	9.6
2,4-Dichlorophenol	ND		0.32	1.9
2,4-Dimethylphenol	ND		0.82	9.6
2,4-Dinitrophenol	ND		5.9	48
4,6-Dinitro-2-methylphenol	ND		2.1	48
2-Nitrophenol	ND		1.6	9.6
Pentachlorophenol	ND		0.64	9.6
Phenol	ND		0.56	1.9
2,4,5-Trichlorophenol	ND		1.5	9.6
2,4,6-Trichlorophenol	ND		1.7	9.6
Acetophenone	ND		0.77	9.6
Atrazine	ND		0.86	9.6
Benzaldehyde	ND		1.4	9.6
1,1'-Biphenyl	ND		0.40	9.6
Caprolactam	ND		11	48
Bis(2-chloroethoxy)methane	ND		0.56	9.6
Bis(2-chloroethyl)ether	ND		0.24	1.9

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5 (Surr)	56		37 - 104
Phenol-d5 (Surr)	43		30 - 102
2-Fluorobiphenyl	58		35 - 108
2,4,6-Tribromophenol (Surr)	68		33 - 122
2-Fluorophenol (Surr)	46		26 - 100
Terphenyl-d14 (Surr)	31		25 - 130

Client: ENVIRON International Corp. Job Number: 180-26012-1

Client Sample ID: **MB-MW-05-20131010**

Lab Sample ID: 180-26012-8 Date Sampled: 10/10/2013 0955
Client Matrix: Water Date Received: 10/12/2013 0900

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	180-87196	Instrument ID:	733
Prep Method:	3520C	Prep Batch:	180-86943	Lab File ID:	N1018006.D
Dilution:	1.0			Initial Weight/Volume:	1040 mL
Analysis Date:	10/18/2013 1458			Final Weight/Volume:	10.0 mL
Prep Date:	10/17/2013 0631			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	59		0.14	1.9
Acenaphthylene	2.0		0.15	1.9
Anthracene	5.5		0.15	1.9
Benzo[a]anthracene	ND		0.14	1.9
Benzo[a]pyrene	ND		0.13	1.9
Benzo[b]fluoranthene	ND		0.15	1.9
Benzo[g,h,i]perylene	ND		0.15	1.9
Benzo[k]fluoranthene	ND		0.53	1.9
Bis(2-ethylhexyl) phthalate	ND		12	19
2,2'-oxybis[1-chloropropane]	ND		0.19	1.9
4-Bromophenyl phenyl ether	ND		0.61	9.6
Butyl benzyl phthalate	ND		1.4	9.6
Carbazole	44		0.15	1.9
4-Chloroaniline	ND		0.85	9.6
2-Chloronaphthalene	ND		0.15	1.9
4-Chlorophenyl phenyl ether	ND		0.48	9.6
Chrysene	ND		0.13	1.9
Dibenz(a,h)anthracene	ND		0.15	1.9
Dibenzofuran	33		0.59	9.6
Di-n-butyl phthalate	ND		1.2	9.6
3,3'-Dichlorobenzidine	ND		1.1	9.6
Diethyl phthalate	ND		1.4	9.6
Dimethyl phthalate	ND		0.74	9.6
2,4-Dinitrotoluene	ND		0.52	9.6
2,6-Dinitrotoluene	ND		0.77	9.6
Di-n-octyl phthalate	ND		2.0	9.6
Fluoranthene	7.5		0.16	1.9
Fluorene	41		0.21	1.9
Hexachlorobenzene	ND		0.18	1.9
Hexachlorobutadiene	ND		0.16	1.9
Hexachlorocyclopentadiene	ND		0.50	9.6
Hexachloroethane	ND		0.60	9.6
Indeno[1,2,3-cd]pyrene	ND		0.19	1.9
Isophorone	ND		0.62	9.6
2-Methylnaphthalene	44		0.12	1.9
Naphthalene	270		0.13	1.9
2-Nitroaniline	ND		3.4	48
3-Nitroaniline	ND		3.1	48
4-Nitroaniline	ND		1.7	48
4-Nitrophenol	ND		6.2	48
Nitrobenzene	ND		0.81	19
N-Nitrosodi-n-propylamine	ND		0.30	1.9
N-Nitrosodiphenylamine	ND		0.82	9.6
Phenanthrene	42		0.41	1.9
Pyrene	3.4		0.15	1.9
4-Chloro-3-methylphenol	ND		0.73	9.6

Client: ENVIRON International Corp. Job Number: 180-26012-1

Client Sample ID: **MB-MW-05-20131010**

Lab Sample ID: 180-26012-8 Date Sampled: 10/10/2013 0955
Client Matrix: Water Date Received: 10/12/2013 0900

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	180-87196	Instrument ID:	733
Prep Method:	3520C	Prep Batch:	180-86943	Lab File ID:	N1018006.D
Dilution:	1.0			Initial Weight/Volume:	1040 mL
Analysis Date:	10/18/2013 1458			Final Weight/Volume:	10.0 mL
Prep Date:	10/17/2013 0631			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
2-Chlorophenol	ND		1.6	9.6
2-Methylphenol	ND		0.83	9.6
Methylphenol, 3 & 4	ND		0.87	9.6
2,4-Dichlorophenol	ND		0.32	1.9
2,4-Dimethylphenol	67		0.82	9.6
2,4-Dinitrophenol	ND		5.9	48
4,6-Dinitro-2-methylphenol	ND		2.1	48
2-Nitrophenol	ND		1.6	9.6
Pentachlorophenol	ND		0.64	9.6
Phenol	ND		0.56	1.9
2,4,5-Trichlorophenol	ND		1.5	9.6
2,4,6-Trichlorophenol	ND		1.7	9.6
Acetophenone	ND		0.77	9.6
Atrazine	ND		0.86	9.6
Benzaldehyde	ND		1.4	9.6
1,1'-Biphenyl	9.3	J	0.40	9.6
Caprolactam	ND		11	48
Bis(2-chloroethoxy)methane	ND		0.56	9.6
Bis(2-chloroethyl)ether	ND		0.24	1.9

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5 (Surr)	51		37 - 104
Phenol-d5 (Surr)	44		30 - 102
2-Fluorobiphenyl	54		35 - 108
2,4,6-Tribromophenol (Surr)	74		33 - 122
2-Fluorophenol (Surr)	44		26 - 100
Terphenyl-d14 (Surr)	27		25 - 130

Client: ENVIRON International Corp. Job Number: 180-26012-1

Client Sample ID: **MB-EB-20131010**

Lab Sample ID: 180-26012-9 Date Sampled: 10/10/2013 0900
Client Matrix: Water Date Received: 10/12/2013 0900

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	180-87196	Instrument ID:	733
Prep Method:	3520C	Prep Batch:	180-86943	Lab File ID:	N1018007.D
Dilution:	1.0			Initial Weight/Volume:	1040 mL
Analysis Date:	10/18/2013 1524			Final Weight/Volume:	10.0 mL
Prep Date:	10/17/2013 0631			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.14	1.9
Acenaphthylene	ND		0.15	1.9
Anthracene	ND		0.15	1.9
Benzo[a]anthracene	ND		0.14	1.9
Benzo[a]pyrene	ND		0.13	1.9
Benzo[b]fluoranthene	ND		0.15	1.9
Benzo[g,h,i]perylene	ND		0.15	1.9
Benzo[k]fluoranthene	ND		0.53	1.9
Bis(2-ethylhexyl) phthalate	ND		12	19
2,2'-oxybis[1-chloropropane]	ND		0.19	1.9
4-Bromophenyl phenyl ether	ND		0.61	9.6
Butyl benzyl phthalate	ND		1.4	9.6
Carbazole	ND		0.15	1.9
4-Chloroaniline	ND		0.85	9.6
2-Chloronaphthalene	ND		0.15	1.9
4-Chlorophenyl phenyl ether	ND		0.48	9.6
Chrysene	ND		0.13	1.9
Dibenz(a,h)anthracene	ND		0.15	1.9
Dibenzofuran	ND		0.59	9.6
Di-n-butyl phthalate	ND		1.2	9.6
3,3'-Dichlorobenzidine	ND		1.1	9.6
Diethyl phthalate	ND		1.4	9.6
Dimethyl phthalate	ND		0.74	9.6
2,4-Dinitrotoluene	ND		0.52	9.6
2,6-Dinitrotoluene	ND		0.77	9.6
Di-n-octyl phthalate	ND		2.0	9.6
Fluoranthene	ND		0.16	1.9
Fluorene	ND		0.21	1.9
Hexachlorobenzene	ND		0.18	1.9
Hexachlorobutadiene	ND		0.16	1.9
Hexachlorocyclopentadiene	ND		0.50	9.6
Hexachloroethane	ND		0.60	9.6
Indeno[1,2,3-cd]pyrene	ND		0.19	1.9
Isophorone	ND		0.62	9.6
2-Methylnaphthalene	ND		0.12	1.9
Naphthalene	ND		0.13	1.9
2-Nitroaniline	ND		3.4	48
3-Nitroaniline	ND		3.1	48
4-Nitroaniline	ND		1.7	48
4-Nitrophenol	ND		6.2	48
Nitrobenzene	ND		0.81	19
N-Nitrosodi-n-propylamine	ND		0.30	1.9
N-Nitrosodiphenylamine	ND		0.82	9.6
Phenanthrene	ND		0.41	1.9
Pyrene	ND		0.15	1.9
4-Chloro-3-methylphenol	ND		0.73	9.6

Client: ENVIRON International Corp. Job Number: 180-26012-1

Client Sample ID: **MB-EB-20131010**

Lab Sample ID: 180-26012-9 Date Sampled: 10/10/2013 0900
Client Matrix: Water Date Received: 10/12/2013 0900

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	180-87196	Instrument ID:	733
Prep Method:	3520C	Prep Batch:	180-86943	Lab File ID:	N1018007.D
Dilution:	1.0			Initial Weight/Volume:	1040 mL
Analysis Date:	10/18/2013 1524			Final Weight/Volume:	10.0 mL
Prep Date:	10/17/2013 0631			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
2-Chlorophenol	ND		1.6	9.6
2-Methylphenol	ND		0.83	9.6
Methylphenol, 3 & 4	ND		0.87	9.6
2,4-Dichlorophenol	ND		0.32	1.9
2,4-Dimethylphenol	ND		0.82	9.6
2,4-Dinitrophenol	ND		5.9	48
4,6-Dinitro-2-methylphenol	ND		2.1	48
2-Nitrophenol	ND		1.6	9.6
Pentachlorophenol	ND		0.64	9.6
Phenol	ND		0.56	1.9
2,4,5-Trichlorophenol	ND		1.5	9.6
2,4,6-Trichlorophenol	ND		1.7	9.6
Acetophenone	ND		0.77	9.6
Atrazine	ND		0.86	9.6
Benzaldehyde	ND		1.4	9.6
1,1'-Biphenyl	ND		0.40	9.6
Caprolactam	ND		11	48
Bis(2-chloroethoxy)methane	ND		0.56	9.6
Bis(2-chloroethyl)ether	ND		0.24	1.9

Surrogate	%Rec	Qualifier	Acceptance Limits
Nitrobenzene-d5 (Surr)	59		37 - 104
Phenol-d5 (Surr)	52		30 - 102
2-Fluorobiphenyl	59		35 - 108
2,4,6-Tribromophenol (Surr)	68		33 - 122
2-Fluorophenol (Surr)	52		26 - 100
Terphenyl-d14 (Surr)	75		25 - 130

Client: ENVIRON International Corp. Job Number: 180-26012-1

Client Sample ID: **MB-MW-02-20131009**

Lab Sample ID: 180-26012-1 Date Sampled: 10/09/2013 1115
Client Matrix: Water Date Received: 10/12/2013 0900

8082A Polychlorinated Biphenyls (PCBs) (GC)

Analysis Method:	8082A	Analysis Batch:	180-87359	Instrument ID:	GC8
Prep Method:	3510C	Prep Batch:	180-86783	Initial Weight/Volume:	1060 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Analysis Date:	10/19/2013 2325			Injection Volume:	1 uL
Prep Date:	10/15/2013 1450			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	ND		0.0024	0.0094
PCB-1221	ND		0.0023	0.0094
PCB-1232	ND		0.0028	0.0094
PCB-1242	ND		0.0018	0.0094
PCB-1248	ND		0.0021	0.0094
PCB-1254	ND		0.0022	0.0094
PCB-1260	ND		0.0013	0.0094
PCB-1262	ND		0.0019	0.0094
PCB-1268	ND		0.0026	0.0094

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl (Surr)	74		50 - 140
Tetrachloro-m-xylene	140		47 - 150

Client: ENVIRON International Corp. Job Number: 180-26012-1

Client Sample ID: **MB-MW-01-20131009**

Lab Sample ID: 180-26012-2 Date Sampled: 10/09/2013 1300
Client Matrix: Water Date Received: 10/12/2013 0900

8082A Polychlorinated Biphenyls (PCBs) (GC)

Analysis Method:	8082A	Analysis Batch:	180-87359	Instrument ID:	GC8
Prep Method:	3510C	Prep Batch:	180-86783	Initial Weight/Volume:	1050 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Analysis Date:	10/21/2013 1024			Injection Volume:	1 uL
Prep Date:	10/15/2013 1450			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	ND		0.0024	0.0095
PCB-1221	ND		0.0024	0.0095
PCB-1232	ND		0.0028	0.0095
PCB-1242	ND		0.0018	0.0095
PCB-1248	ND		0.0022	0.0095
PCB-1254	ND		0.0022	0.0095
PCB-1260	ND		0.0013	0.0095
PCB-1262	ND		0.0020	0.0095
PCB-1268	ND		0.0026	0.0095

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl (Surr)	91		50 - 140
Tetrachloro-m-xylene	139		47 - 150

Client: ENVIRON International Corp. Job Number: 180-26012-1

Client Sample ID: **MB-MW-03-20131009**

Lab Sample ID: 180-26012-3 Date Sampled: 10/09/2013 1405
Client Matrix: Water Date Received: 10/12/2013 0900

8082A Polychlorinated Biphenyls (PCBs) (GC)

Analysis Method:	8082A	Analysis Batch:	180-87359	Instrument ID:	GC8
Prep Method:	3510C	Prep Batch:	180-86783	Initial Weight/Volume:	1050 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Analysis Date:	10/20/2013 0122			Injection Volume:	1 uL
Prep Date:	10/15/2013 1450			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	ND		0.0024	0.0095
PCB-1221	ND		0.0024	0.0095
PCB-1232	ND		0.0028	0.0095
PCB-1242	ND		0.0018	0.0095
PCB-1248	ND		0.0022	0.0095
PCB-1254	ND		0.0022	0.0095
PCB-1260	ND		0.0013	0.0095
PCB-1262	ND		0.0020	0.0095
PCB-1268	ND		0.0026	0.0095

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl (Surr)	83		50 - 140
Tetrachloro-m-xylene	121		47 - 150

Client: ENVIRON International Corp. Job Number: 180-26012-1

Client Sample ID: **MB-EB-20131009**

Lab Sample ID: 180-26012-4 Date Sampled: 10/09/2013 1530
Client Matrix: Water Date Received: 10/12/2013 0900

8082A Polychlorinated Biphenyls (PCBs) (GC)

Analysis Method:	8082A	Analysis Batch:	180-87359	Instrument ID:	GC8
Prep Method:	3510C	Prep Batch:	180-86783	Initial Weight/Volume:	1050 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Analysis Date:	10/20/2013 0151			Injection Volume:	1 uL
Prep Date:	10/15/2013 1450			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	ND		0.0024	0.0095
PCB-1221	ND		0.0024	0.0095
PCB-1232	ND		0.0028	0.0095
PCB-1242	ND		0.0018	0.0095
PCB-1248	ND		0.0022	0.0095
PCB-1254	ND		0.0022	0.0095
PCB-1260	ND		0.0013	0.0095
PCB-1262	ND		0.0020	0.0095
PCB-1268	ND		0.0026	0.0095

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl (Surr)	87		50 - 140
Tetrachloro-m-xylene	114		47 - 150

Client: ENVIRON International Corp. Job Number: 180-26012-1

Client Sample ID: **MB-MW-04-20131009**

Lab Sample ID: 180-26012-5 Date Sampled: 10/09/2013 1052
Client Matrix: Water Date Received: 10/12/2013 0900

8082A Polychlorinated Biphenyls (PCBs) (GC)

Analysis Method:	8082A	Analysis Batch:	180-87359	Instrument ID:	GC8
Prep Method:	3510C	Prep Batch:	180-86783	Initial Weight/Volume:	1060 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Analysis Date:	10/21/2013 1054			Injection Volume:	1 uL
Prep Date:	10/15/2013 1450			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	ND		0.0024	0.0094
PCB-1221	ND		0.0023	0.0094
PCB-1232	ND		0.0028	0.0094
PCB-1242	0.095		0.0018	0.0094
PCB-1248	ND		0.0021	0.0094
PCB-1254	ND		0.0022	0.0094
PCB-1260	ND		0.0013	0.0094
PCB-1262	ND		0.0019	0.0094
PCB-1268	ND		0.0026	0.0094

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl (Surr)	95		50 - 140
Tetrachloro-m-xylene	143		47 - 150

Client: ENVIRON International Corp. Job Number: 180-26012-1

Client Sample ID: **MB-MW-06-20131010**

Lab Sample ID: 180-26012-6 Date Sampled: 10/10/2013 0810
Client Matrix: Water Date Received: 10/12/2013 0900

8082A Polychlorinated Biphenyls (PCBs) (GC)

Analysis Method:	8082A	Analysis Batch:	180-87359	Instrument ID:	GC8
Prep Method:	3510C	Prep Batch:	180-86783	Initial Weight/Volume:	1060 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Analysis Date:	10/21/2013 1123			Injection Volume:	1 uL
Prep Date:	10/15/2013 1450			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	ND		0.0024	0.0094
PCB-1221	ND		0.0023	0.0094
PCB-1232	ND		0.0028	0.0094
PCB-1242	0.015		0.0018	0.0094
PCB-1248	ND		0.0021	0.0094
PCB-1254	ND		0.0022	0.0094
PCB-1260	ND		0.0013	0.0094
PCB-1262	ND		0.0019	0.0094
PCB-1268	ND		0.0026	0.0094

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl (Surr)	47	X	50 - 140
Tetrachloro-m-xylene	72		47 - 150

Client: ENVIRON International Corp. Job Number: 180-26012-1

Client Sample ID: **DUP-20131009**

Lab Sample ID: 180-26012-7 Date Sampled: 10/09/2013 0000
Client Matrix: Water Date Received: 10/12/2013 0900

8082A Polychlorinated Biphenyls (PCBs) (GC)

Analysis Method:	8082A	Analysis Batch:	180-87359	Instrument ID:	GC8
Prep Method:	3510C	Prep Batch:	180-86783	Initial Weight/Volume:	1040 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Analysis Date:	10/20/2013 0319			Injection Volume:	1 uL
Prep Date:	10/15/2013 1450			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	ND		0.0024	0.0096
PCB-1221	ND		0.0024	0.0096
PCB-1232	ND		0.0028	0.0096
PCB-1242	ND		0.0018	0.0096
PCB-1248	ND		0.0022	0.0096
PCB-1254	ND		0.0022	0.0096
PCB-1260	ND		0.0013	0.0096
PCB-1262	ND		0.0020	0.0096
PCB-1268	ND		0.0026	0.0096

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl (Surr)	85		50 - 140
Tetrachloro-m-xylene	133		47 - 150

Client: ENVIRON International Corp. Job Number: 180-26012-1

Client Sample ID: **MB-MW-05-20131010**

Lab Sample ID: 180-26012-8 Date Sampled: 10/10/2013 0955
Client Matrix: Water Date Received: 10/12/2013 0900

8082A Polychlorinated Biphenyls (PCBs) (GC)

Analysis Method:	8082A	Analysis Batch:	180-87359	Instrument ID:	GC8
Prep Method:	3510C	Prep Batch:	180-86783	Initial Weight/Volume:	1050 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Analysis Date:	10/20/2013 0348			Injection Volume:	1 uL
Prep Date:	10/15/2013 1450			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	ND		0.0024	0.0095
PCB-1221	ND		0.0024	0.0095
PCB-1232	ND		0.0028	0.0095
PCB-1242	ND		0.0018	0.0095
PCB-1248	ND		0.0022	0.0095
PCB-1254	ND		0.0022	0.0095
PCB-1260	ND		0.0013	0.0095
PCB-1262	ND		0.0020	0.0095
PCB-1268	ND		0.0026	0.0095

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl (Surr)	90		50 - 140
Tetrachloro-m-xylene	153	X	47 - 150

Client: ENVIRON International Corp. Job Number: 180-26012-1

Client Sample ID: **MB-EB-20131010**

Lab Sample ID: 180-26012-9 Date Sampled: 10/10/2013 0900
Client Matrix: Water Date Received: 10/12/2013 0900

8082A Polychlorinated Biphenyls (PCBs) (GC)

Analysis Method:	8082A	Analysis Batch:	180-87359	Instrument ID:	GC8
Prep Method:	3510C	Prep Batch:	180-86783	Initial Weight/Volume:	1060 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Analysis Date:	10/20/2013 0417			Injection Volume:	1 uL
Prep Date:	10/15/2013 1450			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
PCB-1016	ND		0.0024	0.0094
PCB-1221	ND		0.0023	0.0094
PCB-1232	ND		0.0028	0.0094
PCB-1242	ND		0.0018	0.0094
PCB-1248	ND		0.0021	0.0094
PCB-1254	ND		0.0022	0.0094
PCB-1260	ND		0.0013	0.0094
PCB-1262	ND		0.0019	0.0094
PCB-1268	ND		0.0026	0.0094

Surrogate	%Rec	Qualifier	Acceptance Limits
DCB Decachlorobiphenyl (Surr)	86		50 - 140
Tetrachloro-m-xylene	124		47 - 150

Client: ENVIRON International Corp. Job Number: 180-26012-1

Surrogate Recovery Report

8270D Semivolatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	2FP %Rec	PHL %Rec	NBZ %Rec	FBP %Rec	TBP %Rec	TPH %Rec
180-26012-1	MB-MW-02-20131009	52	52	57	51	70	36
180-26012-2	MB-MW-01-20131009	42	38	52	56	67	37
180-26012-3	MB-MW-03-20131009	46	43	55	57	63	36
180-26012-4	MB-EB-20131009	49	47	55	57	61	65
180-26012-5	MB-MW-04-20131009	46	43	54	59	71	36
180-26012-6	MB-MW-06-20131010	39	34	48	52	63	29
180-26012-7	DUP-20131009	46	43	56	58	68	31
180-26012-8	MB-MW-05-20131010	44	44	51	54	74	27
180-26012-9	MB-EB-20131010	52	52	59	59	68	75
MB 180-86837/1-A		67	66	69	69	70	87
MB 180-86943/1-A		61	60	59	63	69	81
LCS 180-86837/2-A		63	62	60	66	73	84
LCS 180-86943/2-A		62	59	58	61	70	78
LCSD 180-86943/3-A		65	63	60	64	76	79
180-26012-1 MS	MB-MW-02-20131009 MS	49	48	53	47	64	30
180-26012-1 MSD	MB-MW-02-20131009 MSD	48	47	55	48	64	30

Surrogate	Acceptance Limits
2FP = 2-Fluorophenol (Surr)	26-100
PHL = Phenol-d5 (Surr)	30-102
NBZ = Nitrobenzene-d5 (Surr)	37-104
FBP = 2-Fluorobiphenyl	35-108
TBP = 2,4,6-Tribromophenol (Surr)	33-122
TPH = Terphenyl-d14 (Surr)	25-130

Client: ENVIRON International Corp. Job Number: 180-26012-1

Surrogate Recovery Report

8082A Polychlorinated Biphenyls (PCBs) (GC)

Client Matrix: Water

Lab Sample ID	Client Sample ID	TCX2 %Rec	DCB2 %Rec
180-26012-1	MB-MW-02-20131009	140	74
180-26012-2	MB-MW-01-20131009	139	91
180-26012-3	MB-MW-03-20131009	121	83
180-26012-4	MB-EB-20131009	114	87
180-26012-5	MB-MW-04-20131009	143	95
180-26012-6	MB-MW-06-20131010	72	47X
180-26012-7	DUP-20131009	133	85
180-26012-8	MB-MW-05-20131010	153X	90
180-26012-9	MB-EB-20131010	124	86
MB 180-86783/1-C		110	86
LCS 180-86783/2-C		115	89
180-26012-1 MS	MB-MW-02-20131009 MS	128	77
180-26012-1 MSD	MB-MW-02-20131009 MSD	141	86

Surrogate	Acceptance Limits
TCX = Tetrachloro-m-xylene	47-150
DCB = DCB Decachlorobiphenyl (Surr)	50-140

Client: ENVIRON International Corp. Job Number: 180-26012-1

Method Blank - Batch: 180-86837

Method: 8270D
Preparation: 3520C

Lab Sample ID:	MB 180-86837/1-A	Analysis Batch:	180-87081	Instrument ID:	733
Client Matrix:	Water	Prep Batch:	180-86837	Lab File ID:	N1017005.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	10/17/2013 1203	Units:	ug/L	Final Weight/Volume:	10.0 mL
Prep Date:	10/16/2013 0907			Injection Volume:	2 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acenaphthene	ND		0.14	2.0
Acenaphthylene	ND		0.15	2.0
Anthracene	ND		0.15	2.0
Benzo[a]anthracene	ND		0.15	2.0
Benzo[a]pyrene	ND		0.13	2.0
Benzo[b]fluoranthene	ND		0.16	2.0
Benzo[g,h,i]perylene	ND		0.15	2.0
Benzo[k]fluoranthene	ND		0.55	2.0
Bis(2-ethylhexyl) phthalate	ND		13	20
2,2'-oxybis[1-chloropropane]	ND		0.20	2.0
4-Bromophenyl phenyl ether	ND		0.64	10
Butyl benzyl phthalate	ND		1.4	10
Carbazole	ND		0.16	2.0
4-Chloroaniline	ND		0.89	10
2-Chloronaphthalene	ND		0.15	2.0
4-Chlorophenyl phenyl ether	ND		0.50	10
Chrysene	ND		0.14	2.0
Dibenz(a,h)anthracene	ND		0.16	2.0
Dibenzofuran	ND		0.62	10
Di-n-butyl phthalate	ND		1.2	10
3,3'-Dichlorobenzidine	ND		1.1	10
Diethyl phthalate	ND		1.5	10
Dimethyl phthalate	ND		0.77	10
2,4-Dinitrotoluene	ND		0.54	10
2,6-Dinitrotoluene	ND		0.80	10
Di-n-octyl phthalate	ND		2.1	10
Fluoranthene	ND		0.16	2.0
Fluorene	ND		0.22	2.0
Hexachlorobenzene	ND		0.18	2.0
Hexachlorobutadiene	ND		0.17	2.0
Hexachlorocyclopentadiene	ND		0.52	10
Hexachloroethane	ND		0.63	10
Indeno[1,2,3-cd]pyrene	ND		0.20	2.0
Isophorone	ND		0.64	10
2-Methylnaphthalene	ND		0.12	2.0
Naphthalene	ND		0.14	2.0
2-Nitroaniline	ND		3.5	50
3-Nitroaniline	ND		3.2	50
4-Nitroaniline	ND		1.7	50
4-Nitrophenol	ND		6.5	50
Nitrobenzene	ND		0.84	20
N-Nitrosodi-n-propylamine	ND		0.31	2.0
N-Nitrosodiphenylamine	ND		0.85	10
Phenanthrene	ND		0.43	2.0
Pyrene	ND		0.16	2.0

Client: ENVIRON International Corp. Job Number: 180-26012-1

Method Blank - Batch: 180-86837

Method: 8270D
Preparation: 3520C

Lab Sample ID:	MB 180-86837/1-A	Analysis Batch:	180-87081	Instrument ID:	733
Client Matrix:	Water	Prep Batch:	180-86837	Lab File ID:	N1017005.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	10/17/2013 1203	Units:	ug/L	Final Weight/Volume:	10.0 mL
Prep Date:	10/16/2013 0907			Injection Volume:	2 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
4-Chloro-3-methylphenol	ND		0.75	10
2-Chlorophenol	ND		1.7	10
2-Methylphenol	ND		0.86	10
Methylphenol, 3 & 4	ND		0.90	10
2,4-Dichlorophenol	ND		0.33	2.0
2,4-Dimethylphenol	ND		0.85	10
2,4-Dinitrophenol	ND		6.1	50
4,6-Dinitro-2-methylphenol	ND		2.2	50
2-Nitrophenol	ND		1.7	10
Pentachlorophenol	ND		0.66	10
Phenol	ND		0.58	2.0
2,4,5-Trichlorophenol	ND		1.5	10
2,4,6-Trichlorophenol	ND		1.7	10
Acetophenone	ND		0.80	10
Atrazine	ND		0.89	10
Benzaldehyde	ND		1.5	10
1,1'-Biphenyl	ND		0.42	10
Caprolactam	ND		12	50
Bis(2-chloroethoxy)methane	ND		0.58	10
Bis(2-chloroethyl)ether	ND		0.25	2.0

Surrogate	% Rec	Acceptance Limits
Nitrobenzene-d5 (Surr)	69	37 - 104
Phenol-d5 (Surr)	66	30 - 102
2-Fluorobiphenyl	69	35 - 108
2,4,6-Tribromophenol (Surr)	70	33 - 122
2-Fluorophenol (Surr)	67	26 - 100
Terphenyl-d14 (Surr)	87	25 - 130

Lab Control Sample - Batch: 180-86837

Method: 8270D
Preparation: 3520C

Lab Sample ID:	LCS 180-86837/2-A	Analysis Batch:	180-87081	Instrument ID:	733
Client Matrix:	Water	Prep Batch:	180-86837	Lab File ID:	N1017006.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	10/17/2013 1320	Units:	ug/L	Final Weight/Volume:	10.0 mL
Prep Date:	10/16/2013 0907			Injection Volume:	2 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	200	138	69	39 - 106	
Acenaphthylene	200	136	68	40 - 113	
Anthracene	200	137	69	37 - 108	
Benzo[a]anthracene	200	136	68	40 - 103	
Benzo[a]pyrene	200	136	68	37 - 105	
Benzo[b]fluoranthene	200	130	65	35 - 100	
Benzo[g,h,i]perylene	200	150	75	31 - 118	
Benzo[k]fluoranthene	200	135	67	37 - 108	
Bis(2-ethylhexyl) phthalate	200	152	76	35 - 112	
2,2'-oxybis[1-chloropropane]	200	101	51	30 - 100	
4-Bromophenyl phenyl ether	200	144	72	38 - 108	
Butyl benzyl phthalate	200	150	75	34 - 110	
Carbazole	200	131	66	35 - 113	
4-Chloroaniline	200	118	59	26 - 99	
2-Chloronaphthalene	200	125	62	37 - 102	
4-Chlorophenyl phenyl ether	200	140	70	39 - 107	
Chrysene	200	145	73	39 - 103	
Dibenz(a,h)anthracene	200	150	75	32 - 117	
Dibenzofuran	200	136	68	37 - 107	
Di-n-butyl phthalate	200	145	72	36 - 113	
3,3'-Dichlorobenzidine	200	150	75	11 - 106	
Diethyl phthalate	200	145	72	39 - 112	
Dimethyl phthalate	200	140	70	40 - 110	
2,4-Dinitrotoluene	200	142	71	41 - 117	
2,6-Dinitrotoluene	200	145	73	42 - 118	
Di-n-octyl phthalate	200	139	70	27 - 118	
Fluoranthene	200	142	71	35 - 111	
Fluorene	200	138	69	39 - 107	
Hexachlorobenzene	200	143	71	35 - 106	
Hexachlorobutadiene	200	133	66	30 - 103	
Hexachlorocyclopentadiene	200	139	70	19 - 116	
Hexachloroethane	200	121	60	27 - 94	
Indeno[1,2,3-cd]pyrene	200	142	71	32 - 116	
Isophorone	200	132	66	39 - 108	
2-Methylnaphthalene	200	127	63	36 - 101	
Naphthalene	200	125	63	35 - 98	
2-Nitroaniline	200	142	71	37 - 114	
3-Nitroaniline	200	136	68	32 - 117	
4-Nitroaniline	200	135	67	32 - 117	
4-Nitrophenol	400	299	75	29 - 120	
Nitrobenzene	200	123	61	37 - 103	
N-Nitrosodi-n-propylamine	200	126	63	37 - 106	
N-Nitrosodiphenylamine	200	140	70	34 - 108	
Phenanthrene	200	135	67	34 - 107	
Pyrene	200	141	70	36 - 115	
4-Chloro-3-methylphenol	200	134	67	40 - 107	

Client: ENVIRON International Corp. Job Number: 180-26012-1

Lab Control Sample - Batch: 180-86837

Method: 8270D
Preparation: 3520C

Lab Sample ID:	LCS 180-86837/2-A	Analysis Batch:	180-87081	Instrument ID:	733
Client Matrix:	Water	Prep Batch:	180-86837	Lab File ID:	N1017006.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	10/17/2013 1320	Units:	ug/L	Final Weight/Volume:	10.0 mL
Prep Date:	10/16/2013 0907			Injection Volume:	2 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
2-Chlorophenol	200	127	64	34 - 100	
2-Methylphenol	200	128	64	34 - 101	
Methylphenol, 3 & 4	200	128	64	34 - 104	
2,4-Dichlorophenol	200	133	66	34 - 106	
2,4-Dimethylphenol	200	140	70	34 - 98	
2,4-Dinitrophenol	400	266	66	3 - 125	
4,6-Dinitro-2-methylphenol	400	290	72	24 - 121	
2-Nitrophenol	200	134	67	33 - 108	
Pentachlorophenol	400	271	68	10 - 118	
Phenol	200	120	60	35 - 98	
2,4,5-Trichlorophenol	200	140	70	31 - 111	
2,4,6-Trichlorophenol	200	143	71	34 - 110	
Acetophenone	200	113	57	30 - 150	
Atrazine	200	126	63	30 - 150	
Benzaldehyde	200	183	92	30 - 150	
1,1'-Biphenyl	200	132	66	10 - 140	
Caprolactam	200	138	69	10 - 140	
Bis(2-chloroethoxy)methane	200	120	60	36 - 101	
Bis(2-chloroethyl)ether	200	120	60	34 - 96	

Surrogate	% Rec	Acceptance Limits
Nitrobenzene-d5 (Surr)	60	37 - 104
Phenol-d5 (Surr)	62	30 - 102
2-Fluorobiphenyl	66	35 - 108
2,4,6-Tribromophenol (Surr)	73	33 - 122
2-Fluorophenol (Surr)	63	26 - 100
Terphenyl-d14 (Surr)	84	25 - 130

Client: ENVIRON International Corp. Job Number: 180-26012-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 180-86837

Method: 8270D
Preparation: 3520C

MS Lab Sample ID:	180-26012-1	Analysis Batch:	180-87081	Instrument ID:	733
Client Matrix:	Water	Prep Batch:	180-86837	Lab File ID:	N1017008.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1030 mL
Analysis Date:	10/17/2013 1504			Final Weight/Volume:	10.0 mL
Prep Date:	10/16/2013 0907			Injection Volume:	2 uL
Leach Date:	N/A				

MSD Lab Sample ID:	180-26012-1	Analysis Batch:	180-87081	Instrument ID:	733
Client Matrix:	Water	Prep Batch:	180-86837	Lab File ID:	N1017009.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1050 mL
Analysis Date:	10/17/2013 1531			Final Weight/Volume:	10.0 mL
Prep Date:	10/16/2013 0907			Injection Volume:	2 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	59	60	39 - 106	0	32		
Acenaphthylene	57	57	40 - 113	1	33		
Anthracene	58	57	37 - 108	3	40		
Benzo[a]anthracene	59	60	40 - 103	1	33		
Benzo[a]pyrene	43	43	37 - 105	2	35		
Benzo[b]fluoranthene	41	41	35 - 100	4	44		
Benzo[g,h,i]perylene	55	55	31 - 118	1	45		
Benzo[k]fluoranthene	40	40	37 - 108	1	42		
Bis(2-ethylhexyl) phthalate	64	64	35 - 112	2	34		
2,2'-oxybis[1-chloropropane]	42	43	30 - 100	1	38		
4-Bromophenyl phenyl ether	58	59	38 - 108	1	40		
Butyl benzyl phthalate	58	59	34 - 110	0	35		
Carbazole	69	69	35 - 113	3	32		
4-Chloroaniline	43	41	26 - 99	5	55		
2-Chloronaphthalene	51	52	37 - 102	0	34		
4-Chlorophenyl phenyl ether	61	60	39 - 107	5	34		
Chrysene	67	67	39 - 103	3	38		
Dibenz(a,h)anthracene	56	56	32 - 117	2	43		
Dibenzofuran	58	60	37 - 107	1	32		
Di-n-butyl phthalate	61	65	36 - 113	4	39		
3,3'-Dichlorobenzidine	5	4	11 - 106	8	56	J F	J F
Diethyl phthalate	18	16	39 - 112	3	32	F	F
Dimethyl phthalate	64	64	40 - 110	2	33		
2,4-Dinitrotoluene	70	70	41 - 117	2	32		
2,6-Dinitrotoluene	67	68	42 - 118	1	33		
Di-n-octyl phthalate	42	42	27 - 118	2	36		
Fluoranthene	64	65	35 - 111	1	43		
Fluorene	60	61	39 - 107	0	33		
Hexachlorobenzene	61	62	35 - 106	0	36		
Hexachlorobutadiene	52	51	30 - 103	3	41		
Hexachlorocyclopentadiene	37	39	19 - 116	2	57		
Hexachloroethane	47	47	27 - 94	2	43		
Indeno[1,2,3-cd]pyrene	52	52	32 - 116	2	45		

Client: ENVIRON International Corp. Job Number: 180-26012-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 180-86837

Method: 8270D
Preparation: 3520C

MS Lab Sample ID:	180-26012-1	Analysis Batch:	180-87081	Instrument ID:	733
Client Matrix:	Water	Prep Batch:	180-86837	Lab File ID:	N1017008.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1030 mL
Analysis Date:	10/17/2013 1504			Final Weight/Volume:	10.0 mL
Prep Date:	10/16/2013 0907			Injection Volume:	2 uL
Leach Date:	N/A				

MSD Lab Sample ID:	180-26012-1	Analysis Batch:	180-87081	Instrument ID:	733
Client Matrix:	Water	Prep Batch:	180-86837	Lab File ID:	N1017009.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1050 mL
Analysis Date:	10/17/2013 1531			Final Weight/Volume:	10.0 mL
Prep Date:	10/16/2013 0907			Injection Volume:	2 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Isophorone	59	58	39 - 108	3	36		
2-Methylnaphthalene	55	55	36 - 101	1	35		
Naphthalene	53	54	35 - 98	1	39		
2-Nitroaniline	65	65	37 - 114	1	33		
3-Nitroaniline	57	40	32 - 117	37	46		
4-Nitroaniline	65	60	32 - 117	9	39		
4-Nitrophenol	76	70	29 - 120	10	39		
Nitrobenzene	54	56	37 - 103	2	34		
N-Nitrosodi-n-propylamine	54	53	37 - 106	4	36		
N-Nitrosodiphenylamine	62	63	34 - 108	1	42		
Phenanthrene	58	58	34 - 107	2	34		
Pyrene	50	53	36 - 115	4	38		
4-Chloro-3-methylphenol	62	63	40 - 107	0	32		
2-Chlorophenol	53	52	34 - 100	4	31		
2-Methylphenol	53	54	34 - 101	0	34		
Methylphenol, 3 & 4	55	52	34 - 104	8	34		
2,4-Dichlorophenol	58	58	34 - 106	1	33		
2,4-Dimethylphenol	53	55	34 - 98	1	34		
2,4-Dinitrophenol	70	68	3 - 125	5	62		
4,6-Dinitro-2-methylphenol	73	73	24 - 121	2	50		
2-Nitrophenol	58	60	33 - 108	1	41		
Pentachlorophenol	78	75	10 - 118	6	49		
Phenol	46	45	35 - 98	4	35		
2,4,5-Trichlorophenol	63	64	31 - 111	1	32		
2,4,6-Trichlorophenol	62	63	34 - 110	1	35		
Acetophenone	51	49	30 - 150	6	30		
Atrazine	40	41	30 - 150	0	30		
Benzaldehyde	51	52	30 - 150	1	30		
1,1'-Biphenyl	55	57	10 - 140	0	30		
Caprolactam	52	50	10 - 140	3	30		
Bis(2-chloroethoxy)methane	52	54	36 - 101	1	35		
Bis(2-chloroethyl)ether	52	51	34 - 96	3	34		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits

Client: ENVIRON International Corp. Job Number: 180-26012-1

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Nitrobenzene-d5 (Surr)	53	55	37 - 104
Phenol-d5 (Surr)	48	47	30 - 102
2-Fluorobiphenyl	47	48	35 - 108
2,4,6-Tribromophenol (Surr)	64	64	33 - 122
2-Fluorophenol (Surr)	49	48	26 - 100
Terphenyl-d14 (Surr)	30	30	25 - 130

Client: ENVIRON International Corp. Job Number: 180-26012-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 180-86837

Method: 8270D
Preparation: 3520C

MS Lab Sample ID:	180-26012-1	Units: ug/L	MSD Lab Sample ID:	180-26012-1	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	10/17/2013 1504		Analysis Date:	10/17/2013 1531	
Prep Date:	10/16/2013 0907		Prep Date:	10/16/2013 0907	
Leach Date:	N/A		Leach Date:	N/A	

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual		MSD Result/Qual	
Acenaphthene	ND		194	190	114		114	
Acenaphthylene	ND		194	190	111		109	
Anthracene	ND		194	190	113		109	
Benzo[a]anthracene	ND		194	190	115		114	
Benzo[a]pyrene	ND		194	190	83.0		81.4	
Benzo[b]fluoranthene	ND		194	190	80.0		77.3	
Benzo[g,h,i]perylene	ND		194	190	106		105	
Benzo[k]fluoranthene	ND		194	190	76.9		75.9	
Bis(2-ethylhexyl) phthalate	ND		194	190	124		122	
2,2'-oxybis[1-chloropropane]	ND		194	190	80.8		81.3	
4-Bromophenyl phenyl ether	ND		194	190	112		112	
Butyl benzyl phthalate	ND		194	190	112		112	
Carbazole	ND		194	190	134		131	
4-Chloroaniline	ND		194	190	82.7		78.7	
2-Chloronaphthalene	ND		194	190	99.6		99.1	
4-Chlorophenyl phenyl ether	ND		194	190	119		113	
Chrysene	ND		194	190	130		127	
Dibenz(a,h)anthracene	ND		194	190	108		106	
Dibenzofuran	ND		194	190	114		114	
Di-n-butyl phthalate	ND		194	190	119		124	
3,3'-Dichlorobenzidine	ND		194	190	8.82	J F	8.17	J F
Diethyl phthalate	97		194	190	131	F	126	F
Dimethyl phthalate	ND		194	190	125		122	
2,4-Dinitrotoluene	ND		194	190	137		134	
2,6-Dinitrotoluene	ND		194	190	130		129	
Di-n-octyl phthalate	ND		194	190	81.9		80.5	
Fluoranthene	ND		194	190	125		123	
Fluorene	ND		194	190	116		117	
Hexachlorobenzene	ND		194	190	117		117	
Hexachlorobutadiene	ND		194	190	101		98.1	
Hexachlorocyclopentadiene	ND		194	190	71.8		73.6	
Hexachloroethane	ND		194	190	90.6		89.0	
Indeno[1,2,3-cd]pyrene	ND		194	190	102		99.7	
Isophorone	ND		194	190	114		111	
2-Methylnaphthalene	ND		194	190	106		105	
Naphthalene	1.2	J	194	190	104		105	
2-Nitroaniline	ND		194	190	125		124	
3-Nitroaniline	ND		194	190	111		76.1	
4-Nitroaniline	ND		194	190	126		115	
4-Nitrophenol	ND		388	381	296		268	
Nitrobenzene	ND		194	190	105		107	
N-Nitrosodi-n-propylamine	ND		194	190	105		101	
N-Nitrosodiphenylamine	ND		194	190	121		120	

Client: ENVIRON International Corp. Job Number: 180-26012-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 180-86837

Method: 8270D
Preparation: 3520C

MS Lab Sample ID:	180-26012-1	Units: ug/L		MSD Lab Sample ID:	180-26012-1
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	10/17/2013 1504			Analysis Date:	10/17/2013 1531
Prep Date:	10/16/2013 0907			Prep Date:	10/16/2013 0907
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Phenanthrene	ND		194	190	112	110
Pyrene	ND		194	190	97.0	101
4-Chloro-3-methylphenol	ND		194	190	120	120
2-Chlorophenol	ND		194	190	104	99.3
2-Methylphenol	ND		194	190	103	103
Methylphenol, 3 & 4	ND		194	190	107	99.6
2,4-Dichlorophenol	ND		194	190	112	111
2,4-Dimethylphenol	150		194	190	254	257
2,4-Dinitrophenol	ND		388	381	274	260
4,6-Dinitro-2-methylphenol	ND		388	381	282	277
2-Nitrophenol	ND		194	190	113	114
Pentachlorophenol	ND		388	381	303	286
Phenol	ND		194	190	90.1	86.3
2,4,5-Trichlorophenol	ND		194	190	122	121
2,4,6-Trichlorophenol	ND		194	190	121	119
Acetophenone	ND		194	190	99.6	94.3
Atrazine	ND		194	190	77.3	77.3
Benzaldehyde	ND		194	190	99.9	98.7
1,1'-Biphenyl	ND		194	190	108	108
Caprolactam	42	J	194	190	142	138
Bis(2-chloroethoxy)methane	ND		194	190	102	103
Bis(2-chloroethyl)ether	ND		194	190	101	97.5

Client: ENVIRON International Corp. Job Number: 180-26012-1

Method Blank - Batch: 180-86943

Method: 8270D
Preparation: 3520C

Lab Sample ID:	MB 180-86943/1-A	Analysis Batch:	180-87196	Instrument ID:	733
Client Matrix:	Water	Prep Batch:	180-86943	Lab File ID:	N1018002.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	10/18/2013 1157	Units:	ug/L	Final Weight/Volume:	10.0 mL
Prep Date:	10/17/2013 0631			Injection Volume:	2 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acenaphthene	ND		0.14	2.0
Acenaphthylene	ND		0.15	2.0
Anthracene	ND		0.15	2.0
Benzo[a]anthracene	ND		0.15	2.0
Benzo[a]pyrene	ND		0.13	2.0
Benzo[b]fluoranthene	ND		0.16	2.0
Benzo[g,h,i]perylene	ND		0.15	2.0
Benzo[k]fluoranthene	ND		0.55	2.0
Bis(2-ethylhexyl) phthalate	ND		13	20
2,2'-oxybis[1-chloropropane]	ND		0.20	2.0
4-Bromophenyl phenyl ether	ND		0.64	10
Butyl benzyl phthalate	ND		1.4	10
Carbazole	ND		0.16	2.0
4-Chloroaniline	ND		0.89	10
2-Chloronaphthalene	ND		0.15	2.0
4-Chlorophenyl phenyl ether	ND		0.50	10
Chrysene	ND		0.14	2.0
Dibenz(a,h)anthracene	ND		0.16	2.0
Dibenzofuran	ND		0.62	10
Di-n-butyl phthalate	ND		1.2	10
3,3'-Dichlorobenzidine	ND		1.1	10
Diethyl phthalate	ND		1.5	10
Dimethyl phthalate	ND		0.77	10
2,4-Dinitrotoluene	ND		0.54	10
2,6-Dinitrotoluene	ND		0.80	10
Di-n-octyl phthalate	ND		2.1	10
Fluoranthene	ND		0.16	2.0
Fluorene	ND		0.22	2.0
Hexachlorobenzene	ND		0.18	2.0
Hexachlorobutadiene	ND		0.17	2.0
Hexachlorocyclopentadiene	ND		0.52	10
Hexachloroethane	ND		0.63	10
Indeno[1,2,3-cd]pyrene	ND		0.20	2.0
Isophorone	ND		0.64	10
2-Methylnaphthalene	ND		0.12	2.0
Naphthalene	ND		0.14	2.0
2-Nitroaniline	ND		3.5	50
3-Nitroaniline	ND		3.2	50
4-Nitroaniline	ND		1.7	50
4-Nitrophenol	ND		6.5	50
Nitrobenzene	ND		0.84	20
N-Nitrosodi-n-propylamine	ND		0.31	2.0
N-Nitrosodiphenylamine	ND		0.85	10
Phenanthrene	ND		0.43	2.0
Pyrene	ND		0.16	2.0

Client: ENVIRON International Corp. Job Number: 180-26012-1

Method Blank - Batch: 180-86943

Method: 8270D
Preparation: 3520C

Lab Sample ID:	MB 180-86943/1-A	Analysis Batch:	180-87196	Instrument ID:	733
Client Matrix:	Water	Prep Batch:	180-86943	Lab File ID:	N1018002.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	10/18/2013 1157	Units:	ug/L	Final Weight/Volume:	10.0 mL
Prep Date:	10/17/2013 0631			Injection Volume:	2 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
4-Chloro-3-methylphenol	ND		0.75	10
2-Chlorophenol	ND		1.7	10
2-Methylphenol	ND		0.86	10
Methylphenol, 3 & 4	ND		0.90	10
2,4-Dichlorophenol	ND		0.33	2.0
2,4-Dimethylphenol	ND		0.85	10
2,4-Dinitrophenol	ND		6.1	50
4,6-Dinitro-2-methylphenol	ND		2.2	50
2-Nitrophenol	ND		1.7	10
Pentachlorophenol	ND		0.66	10
Phenol	ND		0.58	2.0
2,4,5-Trichlorophenol	ND		1.5	10
2,4,6-Trichlorophenol	ND		1.7	10
Acetophenone	ND		0.80	10
Atrazine	ND		0.89	10
Benzaldehyde	ND		1.5	10
1,1'-Biphenyl	ND		0.42	10
Caprolactam	ND		12	50
Bis(2-chloroethoxy)methane	ND		0.58	10
Bis(2-chloroethyl)ether	ND		0.25	2.0

Surrogate	% Rec	Acceptance Limits
Nitrobenzene-d5 (Surr)	59	37 - 104
Phenol-d5 (Surr)	60	30 - 102
2-Fluorobiphenyl	63	35 - 108
2,4,6-Tribromophenol (Surr)	69	33 - 122
2-Fluorophenol (Surr)	61	26 - 100
Terphenyl-d14 (Surr)	81	25 - 130

Client: ENVIRON International Corp. Job Number: 180-26012-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 180-86943

Method: 8270D
Preparation: 3520C

LCS Lab Sample ID:	LCS 180-86943/2-A	Analysis Batch:	180-87196	Instrument ID:	733
Client Matrix:	Water	Prep Batch:	180-86943	Lab File ID:	N1018003.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	10/18/2013 1248	Units:	ug/L	Final Weight/Volume:	10.0 mL
Prep Date:	10/17/2013 0631			Injection Volume:	2 uL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 180-86943/3-A	Analysis Batch:	180-87196	Instrument ID:	733
Client Matrix:	Water	Prep Batch:	180-86943	Lab File ID:	N1018004.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	10/18/2013 1314	Units:	ug/L	Final Weight/Volume:	10.0 mL
Prep Date:	10/17/2013 0631			Injection Volume:	2 uL
Leach Date:	N/A				

	% Rec.					
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Acenaphthene	64	66	39 - 106	4	32		
Acenaphthylene	62	66	40 - 113	6	33		
Anthracene	62	67	37 - 108	8	40		
Benzo[a]anthracene	64	68	40 - 103	6	33		
Benzo[a]pyrene	61	63	37 - 105	3	35		
Benzo[b]fluoranthene	61	61	35 - 100	0	44		
Benzo[g,h,i]perylene	67	68	31 - 118	2	45		
Benzo[k]fluoranthene	59	61	37 - 108	4	42		
Bis(2-ethylhexyl) phthalate	70	75	35 - 112	6	34		
2,2'-oxybis[1-chloropropane]	48	50	30 - 100	4	38		
4-Bromophenyl phenyl ether	65	71	38 - 108	9	40		
Butyl benzyl phthalate	71	75	34 - 110	6	35		
Carbazole	61	65	35 - 113	6	32		
4-Chloroaniline	56	58	26 - 99	5	55		
2-Chloronaphthalene	55	60	37 - 102	8	34		
4-Chlorophenyl phenyl ether	65	69	39 - 107	6	34		
Chrysene	68	70	39 - 103	4	38		
Dibenz(a,h)anthracene	67	69	32 - 117	3	43		
Dibenzofuran	63	67	37 - 107	5	32		
Di-n-butyl phthalate	64	69	36 - 113	7	39		
3,3'-Dichlorobenzidine	63	65	11 - 106	4	56		
Diethyl phthalate	65	69	39 - 112	5	32		
Dimethyl phthalate	64	69	40 - 110	7	33		
2,4-Dinitrotoluene	66	69	41 - 117	5	32		
2,6-Dinitrotoluene	65	70	42 - 118	7	33		
Di-n-octyl phthalate	66	68	27 - 118	3	36		
Fluoranthene	65	69	35 - 111	6	43		
Fluorene	64	67	39 - 107	5	33		
Hexachlorobenzene	66	71	35 - 106	8	36		
Hexachlorobutadiene	62	65	30 - 103	5	41		
Hexachlorocyclopentadiene	65	69	19 - 116	6	57		
Hexachloroethane	59	62	27 - 94	5	43		
Indeno[1,2,3-cd]pyrene	64	66	32 - 116	3	45		
Isophorone	61	65	39 - 108	7	36		
2-Methylnaphthalene	59	62	36 - 101	5	35		
Naphthalene	59	62	35 - 98	5	39		

Client: ENVIRON International Corp. Job Number: 180-26012-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 180-86943

Method: 8270D
Preparation: 3520C

LCS Lab Sample ID:	LCS 180-86943/2-A	Analysis Batch:	180-87196	Instrument ID:	733
Client Matrix:	Water	Prep Batch:	180-86943	Lab File ID:	N1018003.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	10/18/2013 1248	Units:	ug/L	Final Weight/Volume:	10.0 mL
Prep Date:	10/17/2013 0631			Injection Volume:	2 uL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 180-86943/3-A	Analysis Batch:	180-87196	Instrument ID:	733
Client Matrix:	Water	Prep Batch:	180-86943	Lab File ID:	N1018004.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	10/18/2013 1314	Units:	ug/L	Final Weight/Volume:	10.0 mL
Prep Date:	10/17/2013 0631			Injection Volume:	2 uL
Leach Date:	N/A				

	% Rec.					
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
2-Nitroaniline	63	66	37 - 114	4	33		
3-Nitroaniline	62	65	32 - 117	4	46		
4-Nitroaniline	62	62	32 - 117	0	39		
4-Nitrophenol	67	70	29 - 120	5	39		
Nitrobenzene	56	58	37 - 103	4	34		
N-Nitrosodi-n-propylamine	59	63	37 - 106	7	36		
N-Nitrosodiphenylamine	64	68	34 - 108	6	42		
Phenanthrene	64	68	34 - 107	6	34		
Pyrene	65	67	36 - 115	3	38		
4-Chloro-3-methylphenol	62	67	40 - 107	6	32		
2-Chlorophenol	61	64	34 - 100	5	31		
2-Methylphenol	61	65	34 - 101	6	34		
Methylphenol, 3 & 4	60	64	34 - 104	6	34		
2,4-Dichlorophenol	63	66	34 - 106	5	33		
2,4-Dimethylphenol	65	69	34 - 98	5	34		
2,4-Dinitrophenol	60	63	3 - 125	6	62		
4,6-Dinitro-2-methylphenol	61	66	24 - 121	9	50		
2-Nitrophenol	64	66	33 - 108	3	41		
Pentachlorophenol	55	58	10 - 118	4	49		
Phenol	59	62	35 - 98	4	35		
2,4,5-Trichlorophenol	64	66	31 - 111	2	32		
2,4,6-Trichlorophenol	68	71	34 - 110	4	35		
Acetophenone	57	59	30 - 150	4	30		
Atrazine	64	67	30 - 150	4	30		
Benzaldehyde	55	57	30 - 150	3	30		
1,1'-Biphenyl	61	65	10 - 140	6	30		
Caprolactam	67	70	10 - 140	6	30		
Bis(2-chloroethoxy)methane	56	59	36 - 101	6	35		
Bis(2-chloroethyl)ether	58	62	34 - 96	7	34		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
Nitrobenzene-d5 (Surr)	58	60	37 - 104
Phenol-d5 (Surr)	59	63	30 - 102
2-Fluorobiphenyl	61	64	35 - 108
2,4,6-Tribromophenol (Surr)	70	76	33 - 122
2-Fluorophenol (Surr)	62	65	26 - 100

Client: ENVIRON International Corp. Job Number: 180-26012-1

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
Terphenyl-d14 (Surr)	78	79	25 - 130

Client: ENVIRON International Corp. Job Number: 180-26012-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 180-86943

Method: 8270D
Preparation: 3520C

LCS Lab Sample ID:	LCS 180-86943/2-A	Units: ug/L		LCSD Lab Sample ID:	LCSD 180-86943/3-A
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	10/18/2013 1248			Analysis Date:	10/18/2013 1314
Prep Date:	10/17/2013 0631			Prep Date:	10/17/2013 0631
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Acenaphthene	200	200	127	133
Acenaphthylene	200	200	125	133
Anthracene	200	200	123	133
Benzo[a]anthracene	200	200	128	135
Benzo[a]pyrene	200	200	123	127
Benzo[b]fluoranthene	200	200	123	122
Benzo[g,h,i]perylene	200	200	133	137
Benzo[k]fluoranthene	200	200	118	122
Bis(2-ethylhexyl) phthalate	200	200	141	150
2,2'-oxybis[1-chloropropane]	200	200	95.2	99.4
4-Bromophenyl phenyl ether	200	200	130	143
Butyl benzyl phthalate	200	200	142	150
Carbazole	200	200	122	130
4-Chloroaniline	200	200	111	116
2-Chloronaphthalene	200	200	110	119
4-Chlorophenyl phenyl ether	200	200	131	138
Chrysene	200	200	135	140
Dibenz(a,h)anthracene	200	200	135	139
Dibenzofuran	200	200	127	133
Di-n-butyl phthalate	200	200	129	138
3,3'-Dichlorobenzidine	200	200	126	131
Diethyl phthalate	200	200	131	138
Dimethyl phthalate	200	200	127	137
2,4-Dinitrotoluene	200	200	131	138
2,6-Dinitrotoluene	200	200	129	139
Di-n-octyl phthalate	200	200	132	136
Fluoranthene	200	200	130	139
Fluorene	200	200	128	135
Hexachlorobenzene	200	200	132	142
Hexachlorobutadiene	200	200	124	131
Hexachlorocyclopentadiene	200	200	130	137
Hexachloroethane	200	200	118	124
Indeno[1,2,3-cd]pyrene	200	200	127	132
Isophorone	200	200	122	131
2-Methylnaphthalene	200	200	119	125
Naphthalene	200	200	118	123
2-Nitroaniline	200	200	126	131
3-Nitroaniline	200	200	124	129
4-Nitroaniline	200	200	124	125

Client: ENVIRON International Corp. Job Number: 180-26012-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 180-86943

Method: 8270D
Preparation: 3520C

LCS Lab Sample ID:	LCS 180-86943/2-A	Units: ug/L		LCSD Lab Sample ID:	LCSD 180-86943/3-A
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	10/18/2013 1248			Analysis Date:	10/18/2013 1314
Prep Date:	10/17/2013 0631			Prep Date:	10/17/2013 0631
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
4-Nitrophenol	400	400	266	280
Nitrobenzene	200	200	112	116
N-Nitrosodi-n-propylamine	200	200	117	126
N-Nitrosodiphenylamine	200	200	127	136
Phenanthrene	200	200	128	136
Pyrene	200	200	131	135
4-Chloro-3-methylphenol	200	200	125	133
2-Chlorophenol	200	200	122	128
2-Methylphenol	200	200	123	131
Methylphenol, 3 & 4	200	200	121	128
2,4-Dichlorophenol	200	200	126	133
2,4-Dimethylphenol	200	200	130	137
2,4-Dinitrophenol	400	400	240	254
4,6-Dinitro-2-methylphenol	400	400	244	266
2-Nitrophenol	200	200	127	131
Pentachlorophenol	400	400	222	232
Phenol	200	200	119	124
2,4,5-Trichlorophenol	200	200	129	132
2,4,6-Trichlorophenol	200	200	135	141
Acetophenone	200	200	113	118
Atrazine	200	200	128	134
Benzaldehyde	200	200	110	114
1,1'-Biphenyl	200	200	123	130
Caprolactam	200	200	133	141
Bis(2-chloroethoxy)methane	200	200	112	118
Bis(2-chloroethyl)ether	200	200	116	123

Client: ENVIRON International Corp. Job Number: 180-26012-1

Method Blank - Batch: 180-86783

Method: 8082A
Preparation: 3510C

Lab Sample ID:	MB 180-86783/1-C	Analysis Batch:	180-87359	Instrument ID:	GC8
Client Matrix:	Water	Prep Batch:	180-86783	Lab File ID:	P1030668.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	10/20/2013 0446	Units:	ug/L	Final Weight/Volume:	1.0 mL
Prep Date:	10/15/2013 1450			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
PCB-1016	ND		0.0025	0.010
PCB-1221	ND		0.0025	0.010
PCB-1232	ND		0.0029	0.010
PCB-1242	ND		0.0019	0.010
PCB-1248	ND		0.0023	0.010
PCB-1254	ND		0.0023	0.010
PCB-1260	ND		0.0014	0.010
PCB-1262	ND		0.0021	0.010
PCB-1268	ND		0.0027	0.010

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl (Surr)	86	50 - 140
Tetrachloro-m-xylene	110	47 - 150

Lab Control Sample - Batch: 180-86783

Method: 8082A
Preparation: 3510C

Lab Sample ID:	LCS 180-86783/2-C	Analysis Batch:	180-87359	Instrument ID:	GC8
Client Matrix:	Water	Prep Batch:	180-86783	Lab File ID:	P1030669.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	10/20/2013 0515	Units:	ug/L	Final Weight/Volume:	1.0 mL
Prep Date:	10/15/2013 1450			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
PCB-1016	1.00	1.14	114	60 - 110	*
PCB-1260	1.00	1.14	114	60 - 111	*

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl (Surr)	89	50 - 140
Tetrachloro-m-xylene	115	47 - 150

Client: ENVIRON International Corp. Job Number: 180-26012-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 180-86783

Method: 8082A
Preparation: 3510C

MS Lab Sample ID:	180-26012-1	Analysis Batch:	180-87359	Instrument ID:	GC8
Client Matrix:	Water	Prep Batch:	180-86783	Lab File ID:	P1030658.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1010 mL
Analysis Date:	10/19/2013 2354			Final Weight/Volume:	1.0 mL
Prep Date:	10/15/2013 1450			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	180-26012-1	Analysis Batch:	180-87359	Instrument ID:	GC8
Client Matrix:	Water	Prep Batch:	180-86783	Lab File ID:	P1030659.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1010 mL
Analysis Date:	10/20/2013 0023			Final Weight/Volume:	1.0 mL
Prep Date:	10/15/2013 1450			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
PCB-1016	103	114	60 - 110	9	27		F
PCB-1260	103	113	60 - 111	9	24		F

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
DCB Decachlorobiphenyl (Surr)	77	86	50 - 140
Tetrachloro-m-xylene	128	141	47 - 150

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 180-86783

Method: 8082A
Preparation: 3510C

MS Lab Sample ID:	180-26012-1	Units:	ug/L	MSD Lab Sample ID:	180-26012-1
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	10/19/2013 2354			Analysis Date:	10/20/2013 0023
Prep Date:	10/15/2013 1450			Prep Date:	10/15/2013 1450
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual	
PCB-1016	ND	0.990	0.990	1.02	1.13	F
PCB-1260	ND	0.990	0.990	1.02	1.12	F

DATA REPORTING QUALIFIERS

Client: ENVIRON International Corp. Job Number: 180-26012-1

Lab Section	Qualifier	Description
GC/MS Semi VOA		
	F	MS/MSD Recovery and/or RPD exceeds the control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
GC Semi VOA		
	*	LCS or LCSD exceeds the control limits
	F	MS/MSD Recovery and/or RPD exceeds the control limits
	X	Surrogate is outside control limits

Client: ENVIRON International Corp. Job Number: 180-26012-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 180-86837					
LCS 180-86837/2-A	Lab Control Sample	T	Water	3520C	
MB 180-86837/1-A	Method Blank	T	Water	3520C	
180-26012-1	MB-MW-02-20131009	T	Water	3520C	
180-26012-1MS	Matrix Spike	T	Water	3520C	
180-26012-1MSD	Matrix Spike Duplicate	T	Water	3520C	
180-26012-2	MB-MW-01-20131009	T	Water	3520C	
180-26012-3	MB-MW-03-20131009	T	Water	3520C	
180-26012-4	MB-EB-20131009	T	Water	3520C	
180-26012-5	MB-MW-04-20131009	T	Water	3520C	
180-26012-7	DUP-20131009	T	Water	3520C	
Prep Batch: 180-86943					
LCS 180-86943/2-A	Lab Control Sample	T	Water	3520C	
LCSD 180-86943/3-A	Lab Control Sample Duplicate	T	Water	3520C	
MB 180-86943/1-A	Method Blank	T	Water	3520C	
180-26012-6	MB-MW-06-20131010	T	Water	3520C	
180-26012-8	MB-MW-05-20131010	T	Water	3520C	
180-26012-9	MB-EB-20131010	T	Water	3520C	
Analysis Batch:180-87081					
LCS 180-86837/2-A	Lab Control Sample	T	Water	8270D	180-86837
MB 180-86837/1-A	Method Blank	T	Water	8270D	180-86837
180-26012-1	MB-MW-02-20131009	T	Water	8270D	180-86837
180-26012-1MS	Matrix Spike	T	Water	8270D	180-86837
180-26012-1MSD	Matrix Spike Duplicate	T	Water	8270D	180-86837
180-26012-2	MB-MW-01-20131009	T	Water	8270D	180-86837
180-26012-3	MB-MW-03-20131009	T	Water	8270D	180-86837
180-26012-4	MB-EB-20131009	T	Water	8270D	180-86837
180-26012-5	MB-MW-04-20131009	T	Water	8270D	180-86837
180-26012-7	DUP-20131009	T	Water	8270D	180-86837
Analysis Batch:180-87196					
LCS 180-86943/2-A	Lab Control Sample	T	Water	8270D	180-86943
LCSD 180-86943/3-A	Lab Control Sample Duplicate	T	Water	8270D	180-86943
MB 180-86943/1-A	Method Blank	T	Water	8270D	180-86943
180-26012-6	MB-MW-06-20131010	T	Water	8270D	180-86943
180-26012-8	MB-MW-05-20131010	T	Water	8270D	180-86943
180-26012-9	MB-EB-20131010	T	Water	8270D	180-86943

Report Basis
T = Total

Client: ENVIRON International Corp. Job Number: 180-26012-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 180-86783					
LCS 180-86783/2-C	Lab Control Sample	T	Water	3510C	
MB 180-86783/1-C	Method Blank	T	Water	3510C	
180-26012-1	MB-MW-02-20131009	T	Water	3510C	
180-26012-1MS	Matrix Spike	T	Water	3510C	
180-26012-1MSD	Matrix Spike Duplicate	T	Water	3510C	
180-26012-2	MB-MW-01-20131009	T	Water	3510C	
180-26012-3	MB-MW-03-20131009	T	Water	3510C	
180-26012-4	MB-EB-20131009	T	Water	3510C	
180-26012-5	MB-MW-04-20131009	T	Water	3510C	
180-26012-6	MB-MW-06-20131010	T	Water	3510C	
180-26012-7	DUP-20131009	T	Water	3510C	
180-26012-8	MB-MW-05-20131010	T	Water	3510C	
180-26012-9	MB-EB-20131010	T	Water	3510C	
Analysis Batch:180-87359					
LCS 180-86783/2-C	Lab Control Sample	T	Water	8082A	180-86783
MB 180-86783/1-C	Method Blank	T	Water	8082A	180-86783
180-26012-1	MB-MW-02-20131009	T	Water	8082A	180-86783
180-26012-1MS	Matrix Spike	T	Water	8082A	180-86783
180-26012-1MSD	Matrix Spike Duplicate	T	Water	8082A	180-86783
180-26012-2	MB-MW-01-20131009	T	Water	8082A	180-86783
180-26012-3	MB-MW-03-20131009	T	Water	8082A	180-86783
180-26012-4	MB-EB-20131009	T	Water	8082A	180-86783
180-26012-5	MB-MW-04-20131009	T	Water	8082A	180-86783
180-26012-6	MB-MW-06-20131010	T	Water	8082A	180-86783
180-26012-7	DUP-20131009	T	Water	8082A	180-86783
180-26012-8	MB-MW-05-20131010	T	Water	8082A	180-86783
180-26012-9	MB-EB-20131010	T	Water	8082A	180-86783

Report Basis
T = Total

Client: ENVIRON International Corp. Job Number: 180-26012-1

Laboratory Chronicle

Lab ID: 180-26012-1 **Client ID:** MB-MW-02-20131009

Sample Date/Time: 10/09/2013 11:15 Received Date/Time: 10/12/2013 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-26012-A-1-B		180-87081	180-86837	10/16/2013 09:07	1	TAL PIT	BJT
A:8270D	180-26012-A-1-B		180-87081	180-86837	10/17/2013 14:12	1	TAL PIT	VVP
P:3510C	180-26012-D-1-C		180-87359	180-86783	10/15/2013 14:50	1	TAL PIT	CBY
A:8082A	180-26012-D-1-C		180-87359	180-86783	10/19/2013 23:25	1	TAL PIT	AKG

Lab ID: 180-26012-1 **Client ID:** MB-MW-02-20131009

Sample Date/Time: 10/09/2013 11:15 Received Date/Time: 10/12/2013 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-26012-B-1-A MS		180-87081	180-86837	10/16/2013 09:07	1	TAL PIT	BJT
A:8270D	180-26012-B-1-A MS		180-87081	180-86837	10/17/2013 15:04	1	TAL PIT	VVP
P:3510C	180-26012-A-1-D MS		180-87359	180-86783	10/15/2013 14:50	1	TAL PIT	CBY
A:8082A	180-26012-A-1-D MS		180-87359	180-86783	10/19/2013 23:54	1	TAL PIT	AKG

Lab ID: 180-26012-1 **Client ID:** MB-MW-02-20131009

Sample Date/Time: 10/09/2013 11:15 Received Date/Time: 10/12/2013 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-26012-B-1-B MSD		180-87081	180-86837	10/16/2013 09:07	1	TAL PIT	BJT
A:8270D	180-26012-B-1-B MSD		180-87081	180-86837	10/17/2013 15:31	1	TAL PIT	VVP
P:3510C	180-26012-C-1-C MSD		180-87359	180-86783	10/15/2013 14:50	1	TAL PIT	CBY
A:8082A	180-26012-C-1-C MSD		180-87359	180-86783	10/20/2013 00:23	1	TAL PIT	AKG

Lab ID: 180-26012-2 **Client ID:** MB-MW-01-20131009

Sample Date/Time: 10/09/2013 13:00 Received Date/Time: 10/12/2013 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-26012-A-2-A		180-87081	180-86837	10/16/2013 09:07	1	TAL PIT	BJT
A:8270D	180-26012-A-2-A		180-87081	180-86837	10/17/2013 15:57	1	TAL PIT	VVP
P:3510C	180-26012-D-2-C		180-87359	180-86783	10/15/2013 14:50	1	TAL PIT	CBY
A:8082A	180-26012-D-2-C		180-87359	180-86783	10/21/2013 10:24	1	TAL PIT	AKG

Client: ENVIRON International Corp. Job Number: 180-26012-1

Laboratory Chronicle

Lab ID: 180-26012-3 **Client ID:** MB-MW-03-20131009

Sample Date/Time: 10/09/2013 14:05 Received Date/Time: 10/12/2013 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-26012-C-3-A		180-87081	180-86837	10/16/2013 09:07	1	TAL PIT	BJT
A:8270D	180-26012-C-3-A		180-87081	180-86837	10/17/2013 16:23	1	TAL PIT	VVP
P:3510C	180-26012-D-3-C		180-87359	180-86783	10/15/2013 14:50	1	TAL PIT	CBY
A:8082A	180-26012-D-3-C		180-87359	180-86783	10/20/2013 01:22	1	TAL PIT	AKG

Lab ID: 180-26012-4 **Client ID:** MB-EB-20131009

Sample Date/Time: 10/09/2013 15:30 Received Date/Time: 10/12/2013 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-26012-A-4-A		180-87081	180-86837	10/16/2013 09:07	1	TAL PIT	BJT
A:8270D	180-26012-A-4-A		180-87081	180-86837	10/17/2013 16:49	1	TAL PIT	VVP
P:3510C	180-26012-C-4-C		180-87359	180-86783	10/15/2013 14:50	1	TAL PIT	CBY
A:8082A	180-26012-C-4-C		180-87359	180-86783	10/20/2013 01:51	1	TAL PIT	AKG

Lab ID: 180-26012-5 **Client ID:** MB-MW-04-20131009

Sample Date/Time: 10/09/2013 10:52 Received Date/Time: 10/12/2013 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-26012-B-5-A		180-87081	180-86837	10/16/2013 09:07	1	TAL PIT	BJT
A:8270D	180-26012-B-5-A		180-87081	180-86837	10/17/2013 17:15	1	TAL PIT	VVP
P:3510C	180-26012-D-5-C		180-87359	180-86783	10/15/2013 14:50	1	TAL PIT	CBY
A:8082A	180-26012-D-5-C		180-87359	180-86783	10/21/2013 10:54	1	TAL PIT	AKG

Lab ID: 180-26012-6 **Client ID:** MB-MW-06-20131010

Sample Date/Time: 10/10/2013 08:10 Received Date/Time: 10/12/2013 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-26012-B-6-A		180-87196	180-86943	10/17/2013 06:31	1	TAL PIT	BJT
A:8270D	180-26012-B-6-A		180-87196	180-86943	10/18/2013 14:32	1	TAL PIT	VVP
P:3510C	180-26012-D-6-C		180-87359	180-86783	10/15/2013 14:50	1	TAL PIT	CBY
A:8082A	180-26012-D-6-C		180-87359	180-86783	10/21/2013 11:23	1	TAL PIT	AKG

Lab ID: 180-26012-7 **Client ID:** DUP-20131009

Sample Date/Time: 10/09/2013 00:00 Received Date/Time: 10/12/2013 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-26012-B-7-A		180-87081	180-86837	10/16/2013 09:07	1	TAL PIT	BJT
A:8270D	180-26012-B-7-A		180-87081	180-86837	10/17/2013 17:41	1	TAL PIT	VVP
P:3510C	180-26012-C-7-C		180-87359	180-86783	10/15/2013 14:50	1	TAL PIT	CBY
A:8082A	180-26012-C-7-C		180-87359	180-86783	10/20/2013 03:19	1	TAL PIT	AKG

Client: ENVIRON International Corp. Job Number: 180-26012-1

Laboratory Chronicle

Lab ID: 180-26012-8 **Client ID:** MB-MW-05-20131010

Sample Date/Time: 10/10/2013 09:55 Received Date/Time: 10/12/2013 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-26012-D-8-A		180-87196	180-86943	10/17/2013 06:31	1	TAL PIT	BJT
A:8270D	180-26012-D-8-A		180-87196	180-86943	10/18/2013 14:58	1	TAL PIT	VVP
P:3510C	180-26012-A-8-C		180-87359	180-86783	10/15/2013 14:50	1	TAL PIT	CBY
A:8082A	180-26012-A-8-C		180-87359	180-86783	10/20/2013 03:48	1	TAL PIT	AKG

Lab ID: 180-26012-9 **Client ID:** MB-EB-20131010

Sample Date/Time: 10/10/2013 09:00 Received Date/Time: 10/12/2013 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-26012-C-9-A		180-87196	180-86943	10/17/2013 06:31	1	TAL PIT	BJT
A:8270D	180-26012-C-9-A		180-87196	180-86943	10/18/2013 15:24	1	TAL PIT	VVP
P:3510C	180-26012-D-9-C		180-87359	180-86783	10/15/2013 14:50	1	TAL PIT	CBY
A:8082A	180-26012-D-9-C		180-87359	180-86783	10/20/2013 04:17	1	TAL PIT	AKG

Lab ID: MB **Client ID:** N/A

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	MB 180-86837/1-A		180-87081	180-86837	10/16/2013 09:07	1	TAL PIT	BJT
A:8270D	MB 180-86837/1-A		180-87081	180-86837	10/17/2013 12:03	1	TAL PIT	VVP
P:3520C	MB 180-86943/1-A		180-87196	180-86943	10/17/2013 06:31	1	TAL PIT	BJT
A:8270D	MB 180-86943/1-A		180-87196	180-86943	10/18/2013 11:57	1	TAL PIT	VVP
P:3510C	MB 180-86783/1-C		180-87359	180-86783	10/15/2013 14:50	1	TAL PIT	CBY
A:8082A	MB 180-86783/1-C		180-87359	180-86783	10/20/2013 04:46	1	TAL PIT	AKG

Lab ID: LCS **Client ID:** N/A

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	LCS 180-86837/2-A		180-87081	180-86837	10/16/2013 09:07	1	TAL PIT	BJT
A:8270D	LCS 180-86837/2-A		180-87081	180-86837	10/17/2013 13:20	1	TAL PIT	VVP
P:3520C	LCS 180-86943/2-A		180-87196	180-86943	10/17/2013 06:31	1	TAL PIT	BJT
A:8270D	LCS 180-86943/2-A		180-87196	180-86943	10/18/2013 12:48	1	TAL PIT	VVP
P:3510C	LCS 180-86783/2-C		180-87359	180-86783	10/15/2013 14:50	1	TAL PIT	CBY
A:8082A	LCS 180-86783/2-C		180-87359	180-86783	10/20/2013 05:15	1	TAL PIT	AKG

Client: ENVIRON International Corp. Job Number: 180-26012-1

Laboratory Chronicle

Lab ID: **LCSD** **Client ID:** **N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	LCSD 180-86943/3-A		180-87196	180-86943	10/17/2013 06:31	1	TAL PIT	BJT
A:8270D	LCSD 180-86943/3-A		180-87196	180-86943	10/18/2013 13:14	1	TAL PIT	VVP

Lab References:
TAL PIT = TestAmerica Pittsburgh

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
GCAR1232CALL4_00005	12/30/13	06/29/13	Hexane, Lot 853278	100 mL	GCAR1232STD_00003	0.05 mL	PCB-1232	0.5 ug/mL
.GCAR1232STD_00003	09/30/15		SUPELCO, Lot LB78773		(Purchased Reagent)		PCB-1232	1000 ug/mL
GCAR1232ICV_00007	12/30/13	06/20/13	HEAXANE, Lot 853278	100 mL	GCPCBI1232STD_00001	0.05 mL	PCB-1232	0.5 ug/mL
.GCPCBI1232STD_00001	04/30/17		RESTEK, Lot A073690		(Purchased Reagent)		PCB-1232	1000 ug/mL
GCAR1242CALL4_00005	12/30/13	06/29/13	Hexane, Lot 853278	100 mL	GCAR1242STD_00003	0.05 mL	PCB-1242	0.5 ug/mL
.GCAR1242STD_00003	11/30/14		SUPELCO, Lot LB71718		(Purchased Reagent)		PCB-1242	1000 ug/mL
GCAR1242ICV_00006	12/30/13	06/20/13	HEXANE, Lot 853278	100 mL	GCPCBI1242STD_00001	0.05 mL	PCB-1242	0.5 ug/mL
.GCPCBI1242STD_00001	07/31/16		RESTEK, Lot A068369		(Purchased Reagent)		PCB-1242	1000 ug/mL
GCAR1248CALL4_00005	12/30/13	06/29/13	Hexane, Lot 853278	100 mL	GCAR1248STD_00003	0.05 mL	PCB-1248	0.5 ug/mL
.GCAR1248STD_00003	01/31/15		SUPELCO, Lot LB73022		(Purchased Reagent)		PCB-1248	1000 ug/mL
GCAR1248ICV_00006	12/30/13	06/20/13	HEXANE, Lot 853278	100 mL	GCPCBI1248STD_00001	0.05 mL	PCB-1248	0.5 ug/mL
.GCPCBI1248STD_00001	02/28/17		RESTEK, Lot A072639		(Purchased Reagent)		PCB-1248	1000 ug/mL
GCAR1262CALL4_00005	12/30/13	06/29/13	Hexane, Lot 853278	100 mL	GCAR1262STD_00004	0.05 mL	PCB-1262	0.5 ug/mL
.GCAR1262STD_00004	01/31/14		SUPELCO, Lot LB81172		(Purchased Reagent)		PCB-1262	1000 ug/mL
GCAR1262ICV_00007	12/30/13	06/20/13	HEXANE, Lot 853278	100 mL	GCPCBI1262STD_00001	0.05 mL	PCB-1262	0.5 ug/mL
.GCPCBI1262STD_00001	10/31/15		RESTEK, Lot A063133		(Purchased Reagent)		PCB-1262	1000 ug/mL
GCAR1268CALL4_00008	12/30/13	06/29/13	Hexane, Lot 853278	100 mL	GCAR1268STD_00003	0.05 mL	PCB-1268	0.5 ug/mL
.GCAR1268STD_00003	11/30/14		SUPELCO, Lot LB76554		(Purchased Reagent)		PCB-1268	1000 ug/mL
GCAR1268ICV_00006	12/30/13	06/20/13	HEXANE, Lot 853278	100 mL	GCPCBI1268STD_00001	0.05 mL	PCB-1268	0.5 ug/mL
.GCPCBI1268STD_00001	11/30/14		RESTEK, Lot A055668		(Purchased Reagent)		PCB-1268	1000 ug/mL
GCAR1660CALL1_00008	03/30/14	09/27/13	HEXANE, Lot 927033	100 mL	GC1660WORKS_00006	0.01 mL	PCB-1016 Peak 1	0.01 ug/mL
							PCB-1016 Peak 2	0.01 ug/mL
							PCB-1016 Peak 3	0.01 ug/mL
							PCB-1016 Peak 4	0.01 ug/mL
							PCB-1016 Peak 5	0.01 ug/mL
							PCB-1260 Peak 1	0.01 ug/mL
							PCB-1260 Peak 2	0.01 ug/mL
							PCB-1260 Peak 3	0.01 ug/mL
							PCB-1260 Peak 4	0.01 ug/mL
							PCB-1260 Peak 5	0.01 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.0005 ug/mL
							Tetrachloro-m-xylene	0.0005 ug/mL
.GC1660WORKS_00006	09/30/14	09/27/13	HEXANE, Lot 927033	10 mL	GCPCB1016STD_00003	1 mL	PCB-1016 Peak 1	100 ug/mL
							PCB-1016 Peak 2	100 ug/mL
							PCB-1016 Peak 3	100 ug/mL
							PCB-1016 Peak 4	100 ug/mL
							PCB-1016 Peak 5	100 ug/mL
					GCPCB1260STD_00003	1 mL	PCB-1260 Peak 1	100 ug/mL
							PCB-1260 Peak 2	100 ug/mL
							PCB-1260 Peak 3	100 ug/mL
							PCB-1260 Peak 4	100 ug/mL
							PCB-1260 Peak 5	100 ug/mL
					GCPEST(SURR)S_00001	0.25 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene	5 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..GCPCB1016STD_00003	04/30/15		Supelco, Lot LB78930		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
..GCPCB1260STD_00003	04/30/15		Supelco, Lot LB80264		(Purchased Reagent)		PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..GCPEST(SURR)S_00001	01/30/15		RESTEK, Lot A053922		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
GCAR1660CALL2_00007	03/30/14	09/27/13	HEXANE, Lot 927033	100 mL	GC1660WORKS_00006	0.05 mL	PCB-1016 Peak 1	0.05 ug/mL
							PCB-1016 Peak 2	0.05 ug/mL
							PCB-1016 Peak 3	0.05 ug/mL
							PCB-1016 Peak 4	0.05 ug/mL
							PCB-1016 Peak 5	0.05 ug/mL
							PCB-1260 Peak 1	0.05 ug/mL
							PCB-1260 Peak 2	0.05 ug/mL
							PCB-1260 Peak 3	0.05 ug/mL
							PCB-1260 Peak 4	0.05 ug/mL
							PCB-1260 Peak 5	0.05 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.0025 ug/mL
							Tetrachloro-m-xylene	0.0025 ug/mL
.GC1660WORKS_00006	09/30/14	09/27/13	HEXANE, Lot 927033	10 mL	GCPCB1016STD_00003	1 mL	PCB-1016 Peak 1	100 ug/mL
							PCB-1016 Peak 2	100 ug/mL
							PCB-1016 Peak 3	100 ug/mL
							PCB-1016 Peak 4	100 ug/mL
							PCB-1016 Peak 5	100 ug/mL
					GCPCB1260STD_00003	1 mL	PCB-1260 Peak 1	100 ug/mL
							PCB-1260 Peak 2	100 ug/mL
							PCB-1260 Peak 3	100 ug/mL
							PCB-1260 Peak 4	100 ug/mL
							PCB-1260 Peak 5	100 ug/mL
					GCPEST(SURR)S_00001	0.25 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene	5 ug/mL
..GCPCB1016STD_00003	04/30/15		Supelco, Lot LB78930		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
..GCPCB1260STD_00003	04/30/15		Supelco, Lot LB80264		(Purchased Reagent)		PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..GCPEST(SURR)S_00001	01/30/15		RESTEK, Lot A053922		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tetrachloro-m-xylene	200 ug/mL
GCAR1660CALL3_00006	09/30/14	09/27/13	HEXANE, Lot 774672	100 mL	GC1660WORKS_00006	0.2 mL	PCB-1016 Peak 1	0.2 ug/mL
							PCB-1016 Peak 2	0.2 ug/mL
							PCB-1016 Peak 3	0.2 ug/mL
							PCB-1016 Peak 4	0.2 ug/mL
							PCB-1016 Peak 5	0.2 ug/mL
							PCB-1260 Peak 1	0.2 ug/mL
							PCB-1260 Peak 2	0.2 ug/mL
							PCB-1260 Peak 3	0.2 ug/mL
							PCB-1260 Peak 4	0.2 ug/mL
							PCB-1260 Peak 5	0.2 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.01 ug/mL
							Tetrachloro-m-xylene	0.01 ug/mL
.GC1660WORKS_00006	09/30/14	09/27/13	HEXANE, Lot 927033	10 mL	GCPCB1016STD_00003	1 mL	PCB-1016 Peak 1	100 ug/mL
							PCB-1016 Peak 2	100 ug/mL
							PCB-1016 Peak 3	100 ug/mL
							PCB-1016 Peak 4	100 ug/mL
							PCB-1016 Peak 5	100 ug/mL
					GCPCB1260STD_00003	1 mL	PCB-1260 Peak 1	100 ug/mL
							PCB-1260 Peak 2	100 ug/mL
							PCB-1260 Peak 3	100 ug/mL
							PCB-1260 Peak 4	100 ug/mL
							PCB-1260 Peak 5	100 ug/mL
					GCPEST(SURR)S_00001	0.25 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene	5 ug/mL
..GCPCB1016STD_00003	04/30/15		Supelco, Lot LB78930		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
..GCPCB1260STD_00003	04/30/15		Supelco, Lot LB80264		(Purchased Reagent)		PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..GCPEST(SURR)S_00001	01/30/15		RESTEK, Lot A053922		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
GCAR1660CALL4_00006	03/30/14	09/27/13	HEAXANE, Lot 927033	200 mL	GC1660WORKS_00006	1 mL	PCB-1016	0.5 ug/mL
							PCB-1016 Peak 1	0.5 ug/mL
							PCB-1016 Peak 2	0.5 ug/mL
							PCB-1016 Peak 3	0.5 ug/mL
							PCB-1016 Peak 4	0.5 ug/mL
							PCB-1016 Peak 5	0.5 ug/mL
							PCB-1260	0.5 ug/mL
							PCB-1260 Peak 1	0.5 ug/mL
							PCB-1260 Peak 2	0.5 ug/mL
							PCB-1260 Peak 3	0.5 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1260 Peak 4	0.5 ug/mL
							PCB-1260 Peak 5	0.5 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.025 ug/mL
							Tetrachloro-m-xylene	0.025 ug/mL
.GC1660WORKS_00006	09/30/14	09/27/13	HEXANE, Lot 927033	10 mL	GCPCB1016STD_00003	1 mL	PCB-1016	100 ug/mL
							PCB-1016 Peak 1	100 ug/mL
							PCB-1016 Peak 2	100 ug/mL
							PCB-1016 Peak 3	100 ug/mL
							PCB-1016 Peak 4	100 ug/mL
							PCB-1016 Peak 5	100 ug/mL
					GCPCB1260STD_00003	1 mL	PCB-1260	100 ug/mL
							PCB-1260 Peak 1	100 ug/mL
							PCB-1260 Peak 2	100 ug/mL
							PCB-1260 Peak 3	100 ug/mL
							PCB-1260 Peak 4	100 ug/mL
							PCB-1260 Peak 5	100 ug/mL
					GCPEST(SURR)S_00001	0.25 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene	5 ug/mL
..GCPCB1016STD_00003	04/30/15		Supelco, Lot LB78930		(Purchased Reagent)		PCB-1016	1000 ug/mL
							PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
..GCPCB1260STD_00003	04/30/15		Supelco, Lot LB80264		(Purchased Reagent)		PCB-1260	1000 ug/mL
							PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..GCPEST(SURR)S_00001	01/30/15		RESTEK, Lot A053922		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
GCAR1660CALL5_00006	03/30/14	09/27/13	HEAXNE, Lot 927033	200 mL	GC1660WORKS_00006	2 mL	PCB-1016 Peak 1	1 ug/mL
							PCB-1016 Peak 2	1 ug/mL
							PCB-1016 Peak 3	1 ug/mL
							PCB-1016 Peak 4	1 ug/mL
							PCB-1016 Peak 5	1 ug/mL
							PCB-1260 Peak 1	1 ug/mL
							PCB-1260 Peak 2	1 ug/mL
							PCB-1260 Peak 3	1 ug/mL
							PCB-1260 Peak 4	1 ug/mL
							PCB-1260 Peak 5	1 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.05 ug/mL
							Tetrachloro-m-xylene	0.05 ug/mL
.GC1660WORKS_00006	09/30/14	09/27/13	HEXANE, Lot 927033	10 mL	GCPCB1016STD_00003	1 mL	PCB-1016 Peak 1	100 ug/mL
							PCB-1016 Peak 2	100 ug/mL
							PCB-1016 Peak 3	100 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1016 Peak 4	100 ug/mL
							PCB-1016 Peak 5	100 ug/mL
					GCPCB1260STD_00003	1 mL	PCB-1260 Peak 1	100 ug/mL
							PCB-1260 Peak 2	100 ug/mL
							PCB-1260 Peak 3	100 ug/mL
							PCB-1260 Peak 4	100 ug/mL
							PCB-1260 Peak 5	100 ug/mL
					GCPEST(SURR)S_00001	0.25 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene	5 ug/mL
..GCPCB1016STD_00003	04/30/15		Supelco, Lot LB78930		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
..GCPCB1260STD_00003	04/30/15		Supelco, Lot LB80264		(Purchased Reagent)		PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..GCPEST(SURR)S_00001	01/30/15		RESTEK, Lot A053922		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
GCAR1660CALL6_00006	09/30/14	09/27/13	Hexane, Lot 927033	100 mL	GC1660WORKS_00006	2 mL	PCB-1016 Peak 1	2 ug/mL
							PCB-1016 Peak 2	2 ug/mL
							PCB-1016 Peak 3	2 ug/mL
							PCB-1016 Peak 4	2 ug/mL
							PCB-1016 Peak 5	2 ug/mL
							PCB-1260 Peak 1	2 ug/mL
							PCB-1260 Peak 2	2 ug/mL
							PCB-1260 Peak 3	2 ug/mL
							PCB-1260 Peak 4	2 ug/mL
							PCB-1260 Peak 5	2 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.1 ug/mL
							Tetrachloro-m-xylene	0.1 ug/mL
.GC1660WORKS_00006	09/30/14	09/27/13	HEXANE, Lot 927033	10 mL	GCPCB1016STD_00003	1 mL	PCB-1016 Peak 1	100 ug/mL
							PCB-1016 Peak 2	100 ug/mL
							PCB-1016 Peak 3	100 ug/mL
							PCB-1016 Peak 4	100 ug/mL
							PCB-1016 Peak 5	100 ug/mL
					GCPCB1260STD_00003	1 mL	PCB-1260 Peak 1	100 ug/mL
							PCB-1260 Peak 2	100 ug/mL
							PCB-1260 Peak 3	100 ug/mL
							PCB-1260 Peak 4	100 ug/mL
							PCB-1260 Peak 5	100 ug/mL
					GCPEST(SURR)S_00001	0.25 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene	5 ug/mL
..GCPCB1016STD_00003	04/30/15		Supelco, Lot LB78930		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
..GCPCB1260STD_00003	04/30/15		Supelco, Lot LB80264		(Purchased Reagent)		PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..GCPEST(SURR)S_00001	01/30/15		RESTEK, Lot A053922		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
GCAR1660CALL7_00006	03/30/14	09/27/13	HEXANE, Lot 927033	100 mL	GC1660WORKS_00006	4 mL	PCB-1016 Peak 1	4 ug/mL
							PCB-1016 Peak 2	4 ug/mL
							PCB-1016 Peak 3	4 ug/mL
							PCB-1016 Peak 4	4 ug/mL
							PCB-1016 Peak 5	4 ug/mL
							PCB-1260 Peak 1	4 ug/mL
							PCB-1260 Peak 2	4 ug/mL
							PCB-1260 Peak 3	4 ug/mL
							PCB-1260 Peak 4	4 ug/mL
							PCB-1260 Peak 5	4 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.2 ug/mL
							Tetrachloro-m-xylene	0.2 ug/mL
.GC1660WORKS_00006	09/30/14	09/27/13	HEXANE, Lot 927033	10 mL	GCPCB1016STD_00003	1 mL	PCB-1016 Peak 1	100 ug/mL
							PCB-1016 Peak 2	100 ug/mL
							PCB-1016 Peak 3	100 ug/mL
							PCB-1016 Peak 4	100 ug/mL
							PCB-1016 Peak 5	100 ug/mL
					GCPCB1260STD_00003	1 mL	PCB-1260 Peak 1	100 ug/mL
							PCB-1260 Peak 2	100 ug/mL
							PCB-1260 Peak 3	100 ug/mL
							PCB-1260 Peak 4	100 ug/mL
							PCB-1260 Peak 5	100 ug/mL
					GCPEST(SURR)S_00001	0.25 mL	DCB Decachlorobiphenyl (Surr)	5 ug/mL
							Tetrachloro-m-xylene	5 ug/mL
..GCPCB1016STD_00003	04/30/15		Supelco, Lot LB78930		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
..GCPCB1260STD_00003	04/30/15		Supelco, Lot LB80264		(Purchased Reagent)		PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..GCPEST(SURR)S_00001	01/30/15		RESTEK, Lot A053922		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene	200 ug/mL
GCAR1660ICV_00007	12/30/13	06/20/13	HEXANE, Lot 853278	100 mL	GCPCBI1660STD_00001	0.05 mL	PCB-1016	0.5 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1260	0.5 ug/mL
.GCPCBI1660STD_00001	02/28/17		RESTEK, Lot A072217		(Purchased Reagent)		PCB-1016	1000 ug/mL
							PCB-1260	1000 ug/mL
GCAR2154CALL4_00005	12/30/13	06/29/13	Hexane, Lot 853278	100 mL	GCAR1221STD_00003	0.05 mL	PCB-1221	0.5 ug/mL
					GCAR1254STD_00004	0.05 mL	PCB-1254	0.5 ug/mL
.GCAR1221STD_00003	01/31/14		SUPELCO, Lot LB80950		(Purchased Reagent)		PCB-1221	1000 ug/mL
.GCAR1254STD_00004	01/31/14		SUPELCO, Lot LB80263		(Purchased Reagent)		PCB-1254	1000 ug/mL
GCAR2154ICV_00008	12/30/13	06/20/13	HEXANE, Lot 853278	100 mL	GCPCBI1221STD_00001	0.05 mL	PCB-1221	0.5 ug/mL
					GCPCBI1254STD_00001	0.05 mL	PCB-1254	0.5 ug/mL
.GCPCBI1221STD_00001	11/30/16		RESTEK, Lot A070667		(Purchased Reagent)		PCB-1221	1000 ug/mL
.GCPCBI1254STD_00001	05/31/17		RESTEK, Lot A074320		(Purchased Reagent)		PCB-1254	1000 ug/mL
GCMATRIXWORKS_00008	12/31/13	06/29/13	ACETONE, Lot OP0015-11	250 mL	GCMATRIXSPK_00001	1 mL	PCB-1016	40 ug/mL
							PCB-1260	40 ug/mL
.GCMATRIXSPK_00001	09/30/17		RESTEK, Lot A076606		(Purchased Reagent)		PCB-1016	10000 ug/mL
							PCB-1260	10000 ug/mL
GCTBASOLUTION_00013	09/24/14	09/24/13	DI Water, Lot NONE	2000 g	GCNa2SO3_00003	500 g	Sodium Sulfite	246000 ug/mL
					GCTBA98.0_00002	67.8 g	Tetrabutylammonium Hydrogen Sulfate	33222 ug/mL
.GCNa2SO3_00003	06/05/20		J T Baker, Lot L12605		(Purchased Reagent)		Sodium Sulfite	98.4 %
.GCTBA98.0_00002	12/27/20		JT BAKER, Lot J42621		(Purchased Reagent)		Tetrabutylammonium Hydrogen Sulfate	98 %
op-p/pcb sur_00009	12/03/13	06/03/13	ACETONE, Lot 527609	2000 mL	GCGEHRDCB_00001	1.6 mL	DCB Decachlorobiphenyl (Surr)	0.8032 ug/mL
					GCTCMXSTD_00003	0.8 mL	Tetrachloro-m-xylene	0.8 ug/mL
.GCGEHRDCB_00001	02/28/15		ULTRA, Lot CC-3147Z		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	1004 ug/mL
.GCTCMXSTD_00003	06/01/14		Ultra Scientific, Lot CG-1919		(Purchased Reagent)		Tetrachloro-m-xylene	2000 ug/mL
OPLVISPKMIX1i_00017	03/26/14	09/26/13	Methanol, Lot 0000038701	100 mL	SVLVstd1_00009	20 mL	1,1'-Biphenyl	200 ug/mL
							1,2,4,5-Tetrachlorobenzene	200 ug/mL
							1,2,4-Trichlorobenzene	200 ug/mL
							1,2-Dichlorobenzene	200 ug/mL
							1,2-Diphenylhydrazine	200 ug/mL
							1,3-Dichlorobenzene	200 ug/mL
							1,3-Dinitrobenzene	200 ug/mL
							1,4-Dichlorobenzene	200 ug/mL
							1,4-Dioxane	200 ug/mL
							1-Methylnaphthalene	200 ug/mL
							2,2'-oxybis[1-chloropropane]	200 ug/mL
							2,3,4,6-Tetrachlorophenol	200 ug/mL
							2,4,5-Trichlorophenol	200 ug/mL
							2,4,6-Trichlorophenol	200 ug/mL
							2,4-Dichlorophenol	200 ug/mL
							2,4-Dimethylphenol	200 ug/mL
							2,4-Dinitrophenol	400 ug/mL
							2,4-Dinitrotoluene	200 ug/mL
							2,6-Dinitrotoluene	200 ug/mL
							2-Chloronaphthalene	200 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chlorophenol	200 ug/mL
							2-Methylnaphthalene	200 ug/mL
							2-Methylphenol	200 ug/mL
							2-Nitroaniline	200 ug/mL
							2-Nitrophenol	200 ug/mL
							3 & 4 Methylphenol	200 ug/mL
							3-Nitroaniline	200 ug/mL
							4,6-Dinitro-2-methylphenol	400 ug/mL
							4-Bromophenyl phenyl ether	200 ug/mL
							4-Chloro-3-methylphenol	200 ug/mL
							4-Chloroaniline	200 ug/mL
							4-Chlorophenyl phenyl ether	200 ug/mL
							4-Nitroaniline	200 ug/mL
							4-Nitrophenol	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Acetophenone	200 ug/mL
							Aniline	200 ug/mL
							Anthracene	200 ug/mL
							Azobenzene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Benzyl alcohol	200 ug/mL
							Bis(2-chloroethoxy)methane	200 ug/mL
							Bis(2-chloroethyl)ether	200 ug/mL
							Bis(2-ethylhexyl) phthalate	200 ug/mL
							Butyl benzyl phthalate	200 ug/mL
							Carbazole	200 ug/mL
							Chrysene	200 ug/mL
							Di-n-butyl phthalate	200 ug/mL
							Di-n-octyl phthalate	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Dibenzofuran	200 ug/mL
							Diethyl phthalate	200 ug/mL
							Dimethyl phthalate	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Hexachlorobenzene	200 ug/mL
							Hexachlorobutadiene	200 ug/mL
							Hexachlorocyclopentadiene	200 ug/mL
							Hexachloroethane	200 ug/mL
							Hexadecane	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Isophorone	200 ug/mL
							Methyl Phenols,Total	400 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methylphenol, 3 & 4	200 ug/mL
							n-Decane	200 ug/mL
							N-Nitrosodi-n-propylamine	200 ug/mL
							N-Nitrosodimethylamine	200 ug/mL
							n-Octadecane	200 ug/mL
							Naphthalene	200 ug/mL
							Nitrobenzene	200 ug/mL
							Pentachlorophenol	400 ug/mL
							Phenanthrene	200 ug/mL
							Phenol	200 ug/mL
							Pyrene	200 ug/mL
							Pyridine	200 ug/mL
							Total Cresols	400 ug/mL
					SVLVstd2_00004	10 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Atrazine	200 ug/mL
							Benzidine	200 ug/mL
							Caprolactam	200 ug/mL
					SVLVstd3_00004	10 mL	Benzoic acid	200 ug/mL
					SVLVstd4_00003	10 mL	Indene	200 ug/mL
					SVLVstd5_00006	10 mL	N-Nitrosodiphenylamine	200 ug/mL
					SVLVstd6_00004	10 mL	Benzaldehyde	200 ug/mL
.SVLVstd1_00009	09/30/14		Restek, Lot A094002		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							Methyl Phenols,Total	2000 ug/mL
							Methylphenol, 3 & 4	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
							Total Cresols	2000 ug/mL
.SVLVstd2_00004	08/31/14		Restek, Lot A093775		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
.SVLVstd3_00004	02/28/16		Restek, Lot A093654		(Purchased Reagent)		Benzoic acid	2000 ug/mL
.SVLVstd4_00003	08/31/14		Restek, Lot A093668		(Purchased Reagent)		Indene	2000 ug/mL
.SVLVstd5_00006	02/28/15		Restek, Lot A093671		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
.SVLVstd6_00004	08/31/14		Restek, Lot A093656		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
OPQL8270SURi_00009	03/30/14	09/30/13	Methanol, Lot b#000004990	500 mL	SVLVSURRSPK_00006	20 mL	2,4,6-Tribromophenol (Surr)	200 ug/mL
							2-Fluorobiphenyl	200 ug/mL
							2-Fluorophenol (Surr)	200 ug/mL
							Nitrobenzene-d5 (Surr)	200 ug/mL
							Phenol-d5 (Surr)	200 ug/mL
							Terphenyl-d14 (Surr)	200 ug/mL
.SVLVSURRSPK_00006	02/28/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SVTAP2NDSRCEi_00003	12/25/13	05/25/13	MeCl2, Lot 833279	1 mL	SVLVstd1_00004	10 uL	1,1'-Biphenyl	10 ug/mL
							2,2'-oxybis[1-chloropropane]	10 ug/mL
							2,4,5-Trichlorophenol	10 ug/mL
							2,4,6-Trichlorophenol	10 ug/mL
							2,4-Dichlorophenol	10 ug/mL
							2,4-Dimethylphenol	10 ug/mL
							2,4-Dinitrophenol	20 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							2,6-Dinitrotoluene	10 ug/mL
							2-Chloronaphthalene	10 ug/mL
							2-Chlorophenol	10 ug/mL
							2-Methylnaphthalene	10 ug/mL
							2-Methylphenol	10 ug/mL
							2-Nitroaniline	10 ug/mL
							2-Nitrophenol	10 ug/mL
							3-Nitroaniline	10 ug/mL
							4,6-Dinitro-2-methylphenol	20 ug/mL
							4-Bromophenyl phenyl ether	10 ug/mL
							4-Chloro-3-methylphenol	10 ug/mL
							4-Chloroaniline	10 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chlorophenyl phenyl ether	10 ug/mL
							4-Nitroaniline	10 ug/mL
							4-Nitrophenol	20 ug/mL
							Acenaphthene	10 ug/mL
							Acenaphthylene	10 ug/mL
							Acetophenone	10 ug/mL
							Anthracene	10 ug/mL
							Benzo[a]anthracene	10 ug/mL
							Benzo[a]pyrene	10 ug/mL
							Benzo[b]fluoranthene	10 ug/mL
							Benzo[g,h,i]perylene	10 ug/mL
							Benzo[k]fluoranthene	10 ug/mL
							Bis(2-chloroethoxy)methane	10 ug/mL
							Bis(2-chloroethyl)ether	10 ug/mL
							Bis(2-ethylhexyl) phthalate	10 ug/mL
							Butyl benzyl phthalate	10 ug/mL
							Carbazole	10 ug/mL
							Chrysene	10 ug/mL
							Di-n-butyl phthalate	10 ug/mL
							Di-n-octyl phthalate	10 ug/mL
							Dibenz(a,h)anthracene	10 ug/mL
							Dibenzofuran	10 ug/mL
							Diethyl phthalate	10 ug/mL
							Dimethyl phthalate	10 ug/mL
							Fluoranthene	10 ug/mL
							Fluorene	10 ug/mL
							Hexachlorobenzene	10 ug/mL
							Hexachlorobutadiene	10 ug/mL
							Hexachlorocyclopentadiene	10 ug/mL
							Hexachloroethane	10 ug/mL
							Indeno[1,2,3-cd]pyrene	10 ug/mL
							Isophorone	10 ug/mL
							Methylphenol, 3 & 4	10 ug/mL
							N-Nitrosodi-n-propylamine	10 ug/mL
							Naphthalene	10 ug/mL
							Nitrobenzene	10 ug/mL
							Pentachlorophenol	20 ug/mL
							Phenanthrene	10 ug/mL
							Phenol	10 ug/mL
							Pyrene	10 ug/mL
					SVLVstd2_00004	5 uL	3,3'-Dichlorobenzidine	10 ug/mL
							Atrazine	10 ug/mL
							Caprolactam	10 ug/mL
					SVLVstd5_00006	5 uL	N-Nitrosodiphenylamine	10 ug/mL
					SVLVstd6_00004	5 uL	Benzaldehyde	10 ug/mL
					SVLVSURRSPK_00004	2 uL	2,4,6-Tribromophenol (Surr)	10 ug/mL
							2-Fluorobiphenyl	10 ug/mL
							2-Fluorophenol (Surr)	10 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Nitrobenzene-d5 (Surr)	10 ug/mL
							Phenol-d5 (Surr)	10 ug/mL
							Terphenyl-d14 (Surr)	10 ug/mL
.SVLVstd1_00004	09/30/14		Restek, Lot A094002		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							Methylphenol, 3 & 4	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
.SVLVstd2_00004	08/31/14		Restek, Lot A093775		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Caprolactam	2000 ug/mL
.SVLVstd5_00006	02/28/15		Restek, Lot A093671		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
.SVLVstd6_00004	08/31/14		Restek, Lot A093656		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
.SVLVSURRSPK_00004	02/28/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SVTAPSTD0.4i_00001	12/25/13	05/25/13	MeCl2, Lot 833279	1 mL	SVTAPITINTRNi_00001	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTOCKi_00001	5 uL	2-Naphthylamine	0.2 ug/mL
							1,1'-Biphenyl	0.2 ug/mL
							1,2,4,5-Tetrachlorobenzene	0.2 ug/mL
							1,2,4-Trichlorobenzene	0.2 ug/mL
							1,2-Dichlorobenzene	0.2 ug/mL
							1,3-Dichlorobenzene	0.2 ug/mL
							1,3-Dinitrobenzene	0.2 ug/mL
							1,4-Dichlorobenzene	0.2 ug/mL
							1,4-Dioxane	0.2 ug/mL
							1-Methylnaphthalene	0.2 ug/mL
							2,2'-oxybis[1-chloropropane]	0.2 ug/mL
							2,3,4,6-Tetrachlorophenol	0.2 ug/mL
							2,4,5-Trichlorophenol	0.2 ug/mL
							2,4,6-Trichlorophenol	0.2 ug/mL
							2,4-Dichlorophenol	0.2 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dimethylphenol	0.2 ug/mL
							2,4-Dinitrophenol	0.4 ug/mL
							2,4-Dinitrotoluene	0.2 ug/mL
							2,6-Dinitrotoluene	0.2 ug/mL
							2-Chloronaphthalene	0.2 ug/mL
							2-Chlorophenol	0.2 ug/mL
							2-Methylnaphthalene	0.2 ug/mL
							2-Methylphenol	0.2 ug/mL
							2-Nitroaniline	0.2 ug/mL
							2-Nitrophenol	0.2 ug/mL
							3-Nitroaniline	0.2 ug/mL
							4,6-Dinitro-2-methylphenol	0.4 ug/mL
							4-Bromophenyl phenyl ether	0.2 ug/mL
							4-Chloro-3-methylphenol	0.2 ug/mL
							4-Chloroaniline	0.2 ug/mL
							4-Chlorophenyl phenyl ether	0.2 ug/mL
							4-Nitroaniline	0.2 ug/mL
							4-Nitrophenol	0.4 ug/mL
							Acenaphthene	0.2 ug/mL
							Acenaphthylene	0.2 ug/mL
							Acetophenone	0.2 ug/mL
							Aniline	0.2 ug/mL
							Anthracene	0.2 ug/mL
							Benzo[a]anthracene	0.2 ug/mL
							Benzo[a]pyrene	0.2 ug/mL
							Benzo[b]fluoranthene	0.2 ug/mL
							Benzo[g,h,i]perylene	0.2 ug/mL
							Benzo[k]fluoranthene	0.2 ug/mL
							Benzyl alcohol	0.2 ug/mL
							Bis(2-chloroethoxy)methane	0.2 ug/mL
							Bis(2-chloroethyl)ether	0.2 ug/mL
							Bis(2-ethylhexyl) phthalate	0.2 ug/mL
							Butyl benzyl phthalate	0.2 ug/mL
							Carbazole	0.2 ug/mL
							Chrysene	0.2 ug/mL
							Di-n-butyl phthalate	0.2 ug/mL
							Di-n-octyl phthalate	0.2 ug/mL
							Dibenz(a,h)anthracene	0.2 ug/mL
							Dibenzofuran	0.2 ug/mL
							Diethyl phthalate	0.2 ug/mL
							Dimethyl phthalate	0.2 ug/mL
							Fluoranthene	0.2 ug/mL
							Fluorene	0.2 ug/mL
							Hexachlorobenzene	0.2 ug/mL
							Hexachlorobutadiene	0.2 ug/mL
							Hexachlorocyclopentadiene	0.2 ug/mL
							Hexachloroethane	0.2 ug/mL
							Hexadecane	0.2 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Indeno[1,2,3-cd]pyrene	0.2 ug/mL
							Isophorone	0.2 ug/mL
							Methylphenol, 3 & 4	0.2 ug/mL
							n-Decane	0.2 ug/mL
							N-Nitrosodi-n-propylamine	0.2 ug/mL
							N-Nitrosodimethylamine	0.2 ug/mL
							n-Octadecane	0.2 ug/mL
							Naphthalene	0.2 ug/mL
							Nitrobenzene	0.2 ug/mL
							Pentachlorophenol	0.4 ug/mL
							Phenanthrene	0.2 ug/mL
							Phenol	0.2 ug/mL
							Pyrene	0.2 ug/mL
							Pyridine	0.2 ug/mL
							3,3'-Dichlorobenzidine	0.2 ug/mL
							Atrazine	0.2 ug/mL
							Benzidine	0.2 ug/mL
							Caprolactam	0.2 ug/mL
							Benzoic acid	0.4 ug/mL
							Indene	0.2 ug/mL
							N-Nitrosodiphenylamine	0.2 ug/mL
							Benzaldehyde	0.2 ug/mL
							2,3,5,6-Tetrachlorophenol	0.2 ug/mL
							2,6-Dichlorophenol	0.2 ug/mL
							7,12-Dimethylbenz(a)anthracene	0.2 ug/mL
							Methyl methanesulfonate	0.2 ug/mL
							2,4,6-Tribromophenol (Surr)	0.2 ug/mL
							2-Fluorobiphenyl	0.2 ug/mL
							2-Fluorophenol (Surr)	0.2 ug/mL
							Nitrobenzene-d5 (Surr)	0.2 ug/mL
							Phenol-d5 (Surr)	0.2 ug/mL
							Terphenyl-d14 (Surr)	0.2 ug/mL
							N-Nitrosopyrrolidine	0.2 ug/mL
.SVTAPITINTRNi_00001	05/25/14	05/25/13	MeCl2, Lot 833279	25 mL	SVLVIntstd_00003	5000 uL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00003	02/28/18	Restek, Lot A093676			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTOCKi_00001	12/25/13	05/25/13	MeCl2, Lot 833279	20 mL	SV2NAPAMINEs_00001	800 uL	2-Naphthylamine	40 ug/mL
					SVLVstd1_00005	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							Methylphenol, 3 & 4	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd2_00004	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd3_00005	800 uL	Benzoic acid	80 ug/mL
					SVLVstd4_00005	400 uL	Indene	40 ug/mL
					SVLVstd5_00007	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd6_00003	400 uL	Benzaldehyde	40 ug/mL
					SVLVSupstd2_00004	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					SVNNITROPYROs_00001	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..SV2NAPAMINEs_00001	04/30/14	Ultra Scientific, Lot CG-1087			(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..SVLVstd1_00005	09/30/14	Restek, Lot A094002			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							Methylphenol, 3 & 4	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SVLVstd2_00004	08/31/14		Restek, Lot A093775		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd3_00005	02/28/16		Restek, Lot A093441		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..SVLVstd4_00005	08/31/14		Restek, Lot A093730		(Purchased Reagent)		Indene	2000 ug/mL
..SVLVstd5_00007	02/28/15		Restek, Lot A093442		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd6_00003	08/31/14		Restek, Lot A093656		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
..SVLVSupstd2_00004	02/28/15		Restek, Lot A093658		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Methyl methanesulfonate	1000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..SVNNITROPYROs_00001	12/09/14		Absolute Standards, Lot 120909		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD10i_00018	10/12/13	10/05/13	MeCl2, Lot 833279	1 mL	SVTAPITINTRNi_00001	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTOCKi_00001	125 uL	2-Naphthylamine	5 ug/mL
							1,1'-Biphenyl	5 ug/mL
							1,2,4,5-Tetrachlorobenzene	5 ug/mL
							1,2,4-Trichlorobenzene	5 ug/mL
							1,2-Dichlorobenzene	5 ug/mL
							1,3-Dichlorobenzene	5 ug/mL
							1,3-Dinitrobenzene	5 ug/mL
							1,4-Dichlorobenzene	5 ug/mL
							1,4-Dioxane	5 ug/mL
							1-Methylnaphthalene	5 ug/mL
							2,2'-oxybis[1-chloropropane]	5 ug/mL
							2,3,4,6-Tetrachlorophenol	5 ug/mL
							2,4,5-Trichlorophenol	5 ug/mL
							2,4,6-Trichlorophenol	5 ug/mL
							2,4-Dichlorophenol	5 ug/mL
							2,4-Dimethylphenol	5 ug/mL
							2,4-Dinitrophenol	10 ug/mL
							2,4-Dinitrotoluene	5 ug/mL
							2,6-Dinitrotoluene	5 ug/mL
							2-Chloronaphthalene	5 ug/mL
							2-Chlorophenol	5 ug/mL
							2-Methylnaphthalene	5 ug/mL
							2-Methylphenol	5 ug/mL
							2-Nitroaniline	5 ug/mL
							2-Nitrophenol	5 ug/mL
							3-Nitroaniline	5 ug/mL
							4,6-Dinitro-2-methylphenol	10 ug/mL
							4-Bromophenyl phenyl ether	5 ug/mL
							4-Chloro-3-methylphenol	5 ug/mL
							4-Chloroaniline	5 ug/mL
							4-Chlorophenyl phenyl ether	5 ug/mL
							4-Nitroaniline	5 ug/mL
							4-Nitrophenol	10 ug/mL
							Acenaphthene	5 ug/mL
							Acenaphthylene	5 ug/mL
							Acetophenone	5 ug/mL
							Aniline	5 ug/mL
							Anthracene	5 ug/mL
							Benzo[a]anthracene	5 ug/mL
							Benzo[a]pyrene	5 ug/mL
							Benzo[b]fluoranthene	5 ug/mL
							Benzo[g,h,i]perylene	5 ug/mL
							Benzo[k]fluoranthene	5 ug/mL
							Benzyl alcohol	5 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-chloroethoxy)methane	5 ug/mL
							Bis(2-chloroethyl)ether	5 ug/mL
							Bis(2-ethylhexyl) phthalate	5 ug/mL
							Butyl benzyl phthalate	5 ug/mL
							Carbazole	5 ug/mL
							Chrysene	5 ug/mL
							Di-n-butyl phthalate	5 ug/mL
							Di-n-octyl phthalate	5 ug/mL
							Dibenz(a,h)anthracene	5 ug/mL
							Dibenzofuran	5 ug/mL
							Diethyl phthalate	5 ug/mL
							Dimethyl phthalate	5 ug/mL
							Fluoranthene	5 ug/mL
							Fluorene	5 ug/mL
							Hexachlorobenzene	5 ug/mL
							Hexachlorobutadiene	5 ug/mL
							Hexachlorocyclopentadiene	5 ug/mL
							Hexachloroethane	5 ug/mL
							Hexadecane	5 ug/mL
							Indeno[1,2,3-cd]pyrene	5 ug/mL
							Isophorone	5 ug/mL
							Methylphenol, 3 & 4	5 ug/mL
							n-Decane	5 ug/mL
							N-Nitrosodi-n-propylamine	5 ug/mL
							N-Nitrosodimethylamine	5 ug/mL
							n-Octadecane	5 ug/mL
							Naphthalene	5 ug/mL
							Nitrobenzene	5 ug/mL
							Pentachlorophenol	10 ug/mL
							Phenanthrene	5 ug/mL
							Phenol	5 ug/mL
							Pyrene	5 ug/mL
							Pyridine	5 ug/mL
							3,3'-Dichlorobenzidine	5 ug/mL
							Atrazine	5 ug/mL
							Benzidine	5 ug/mL
							Caprolactam	5 ug/mL
							Benzoic acid	10 ug/mL
							Indene	5 ug/mL
							N-Nitrosodiphenylamine	5 ug/mL
							Benzaldehyde	5 ug/mL
							2,3,5,6-Tetrachlorophenol	5 ug/mL
							2,6-Dichlorophenol	5 ug/mL
							7,12-Dimethylbenz(a)anthracene	5 ug/mL
							Methyl methanesulfonate	5 ug/mL
							2,4,6-Tribromophenol (Surr)	5 ug/mL
							2-Fluorobiphenyl	5 ug/mL
							2-Fluorophenol (Surr)	5 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Nitrobenzene-d5 (Surr)	5 ug/mL
							Phenol-d5 (Surr)	5 ug/mL
							Terphenyl-d14 (Surr)	5 ug/mL
							N-Nitrosopyrrolidine	5 ug/mL
.SVTAPITINTRNi_00001	05/25/14	05/25/13	MeCl2, Lot 833279	25 mL	SVLVIntstd_00003	5000 uL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00003	02/28/18	Restek, Lot A093676			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTOCKi_00001	12/25/13	05/25/13	MeCl2, Lot 833279	20 mL	SV2NAPAMINEs_00001	800 uL	2-Naphthylamine	40 ug/mL
					SVLVstd1_00005	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Nitroaniline	40 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							Methylphenol, 3 & 4	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd2_00004	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Caprolactam	40 ug/mL
					SVLVstd3_00005	800 uL	Benzoic acid	80 ug/mL
					SVLVstd4_00005	400 uL	Indene	40 ug/mL
					SVLVstd5_00007	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd6_00003	400 uL	Benzaldehyde	40 ug/mL
					SVLVSupstd2_00004	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					SVNNITROPYROs_00001	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..SV2NAPAMINEs_00001	04/30/14	Ultra Scientific, Lot CG-1087			(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..SVLVstd1_00005	09/30/14	Restek, Lot A094002			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							Methylphenol, 3 & 4	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SVLVstd2_00004	08/31/14		Restek, Lot A093775		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Caprolactam	2000 ug/mL
..SVLVstd3_00005	02/28/16		Restek, Lot A093441		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..SVLVstd4_00005	08/31/14		Restek, Lot A093730		(Purchased Reagent)		Indene	2000 ug/mL
..SVLVstd5_00007	02/28/15		Restek, Lot A093442		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd6_00003	08/31/14		Restek, Lot A093656		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
..SVLVSupstd2_00004	02/28/15		Restek, Lot A093658		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Methyl methanesulfonate	1000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..SVNNITROPYROs_00001	12/09/14		Absolute Standards, Lot 120909		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD10i_00019	10/21/13	10/14/13	MeCl2, Lot 833279	1 mL	SVTAPITSTOCKi_00001	125 uL	1,1'-Biphenyl	5 ug/mL
							2,2'-oxybis[1-chloropropane]	5 ug/mL
							2,4,5-Trichlorophenol	5 ug/mL
							2,4,6-Trichlorophenol	5 ug/mL
							2,4-Dichlorophenol	5 ug/mL
							2,4-Dimethylphenol	5 ug/mL
							2,4-Dinitrophenol	10 ug/mL
							2,4-Dinitrotoluene	5 ug/mL
							2,6-Dinitrotoluene	5 ug/mL
							2-Chloronaphthalene	5 ug/mL
							2-Chlorophenol	5 ug/mL
							2-Methylnaphthalene	5 ug/mL
							2-Methylphenol	5 ug/mL
							2-Nitroaniline	5 ug/mL
							2-Nitrophenol	5 ug/mL
							3-Nitroaniline	5 ug/mL
							4,6-Dinitro-2-methylphenol	10 ug/mL
							4-Bromophenyl phenyl ether	5 ug/mL
							4-Chloro-3-methylphenol	5 ug/mL
							4-Chloroaniline	5 ug/mL
							4-Chlorophenyl phenyl ether	5 ug/mL
							4-Nitroaniline	5 ug/mL
							4-Nitrophenol	10 ug/mL
							Acenaphthene	5 ug/mL
							Acenaphthylene	5 ug/mL
							Acetophenone	5 ug/mL
							Anthracene	5 ug/mL
							Benzo[a]anthracene	5 ug/mL
							Benzo[a]pyrene	5 ug/mL
							Benzo[b]fluoranthene	5 ug/mL
							Benzo[g,h,i]perylene	5 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[k]fluoranthene	5 ug/mL
							Bis(2-chloroethoxy)methane	5 ug/mL
							Bis(2-chloroethyl)ether	5 ug/mL
							Bis(2-ethylhexyl) phthalate	5 ug/mL
							Butyl benzyl phthalate	5 ug/mL
							Carbazole	5 ug/mL
							Chrysene	5 ug/mL
							Di-n-butyl phthalate	5 ug/mL
							Di-n-octyl phthalate	5 ug/mL
							Dibenz(a,h)anthracene	5 ug/mL
							Dibenzofuran	5 ug/mL
							Diethyl phthalate	5 ug/mL
							Dimethyl phthalate	5 ug/mL
							Fluoranthene	5 ug/mL
							Fluorene	5 ug/mL
							Hexachlorobenzene	5 ug/mL
							Hexachlorobutadiene	5 ug/mL
							Hexachlorocyclopentadiene	5 ug/mL
							Hexachloroethane	5 ug/mL
							Indeno[1,2,3-cd]pyrene	5 ug/mL
							Isophorone	5 ug/mL
							Methylphenol, 3 & 4	5 ug/mL
							N-Nitrosodi-n-propylamine	5 ug/mL
							Naphthalene	5 ug/mL
							Nitrobenzene	5 ug/mL
							Pentachlorophenol	10 ug/mL
							Phenanthrene	5 ug/mL
							Phenol	5 ug/mL
							Pyrene	5 ug/mL
							3,3'-Dichlorobenzidine	5 ug/mL
							Atrazine	5 ug/mL
							Caprolactam	5 ug/mL
							N-Nitrosodiphenylamine	5 ug/mL
							Benzaldehyde	5 ug/mL
							2,4,6-Tribromophenol (Surr)	5 ug/mL
							2-Fluorobiphenyl	5 ug/mL
							2-Fluorophenol (Surr)	5 ug/mL
							Nitrobenzene-d5 (Surr)	5 ug/mL
							Phenol-d5 (Surr)	5 ug/mL
							Terphenyl-d14 (Surr)	5 ug/mL
.SVTAPITSTOCKi_00001	12/25/13	05/25/13	MeCl2, Lot 833279	20 mL	SVLVstd1_00005	800 uL	1,1'-Biphenyl	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							Methylphenol, 3 & 4	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
					SVLVstd2_00004	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd5_00007	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd6_00003	400 uL	Benzaldehyde	40 ug/mL
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
..SVLVstd1_00005	09/30/14		Restek, Lot A094002		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							Methylphenol, 3 & 4	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
..SVLVstd2_00004	08/31/14		Restek, Lot A093775		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd5_00007	02/28/15		Restek, Lot A093442		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd6_00003	08/31/14		Restek, Lot A093656		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SVTAPSTD2.0i_00001	12/25/13	05/25/13	MeCl2, Lot 833279	1 mL	SVTAPITINTRNi_00001	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTOCKi_00001	25 uL	2-Naphthylamine	1 ug/mL
							1,1'-Biphenyl	1 ug/mL
							1,2,4,5-Tetrachlorobenzene	1 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	1 ug/mL
							1,2-Dichlorobenzene	1 ug/mL
							1,3-Dichlorobenzene	1 ug/mL
							1,3-Dinitrobenzene	1 ug/mL
							1,4-Dichlorobenzene	1 ug/mL
							1,4-Dioxane	1 ug/mL
							1-Methylnaphthalene	1 ug/mL
							2,2'-oxybis[1-chloropropane]	1 ug/mL
							2,3,4,6-Tetrachlorophenol	1 ug/mL
							2,4,5-Trichlorophenol	1 ug/mL
							2,4,6-Trichlorophenol	1 ug/mL
							2,4-Dichlorophenol	1 ug/mL
							2,4-Dimethylphenol	1 ug/mL
							2,4-Dinitrophenol	2 ug/mL
							2,4-Dinitrotoluene	1 ug/mL
							2,6-Dinitrotoluene	1 ug/mL
							2-Chloronaphthalene	1 ug/mL
							2-Chlorophenol	1 ug/mL
							2-Methylnaphthalene	1 ug/mL
							2-Methylphenol	1 ug/mL
							2-Nitroaniline	1 ug/mL
							2-Nitrophenol	1 ug/mL
							3-Nitroaniline	1 ug/mL
							4,6-Dinitro-2-methylphenol	2 ug/mL
							4-Bromophenyl phenyl ether	1 ug/mL
							4-Chloro-3-methylphenol	1 ug/mL
							4-Chloroaniline	1 ug/mL
							4-Chlorophenyl phenyl ether	1 ug/mL
							4-Nitroaniline	1 ug/mL
							4-Nitrophenol	2 ug/mL
							Acenaphthene	1 ug/mL
							Acenaphthylene	1 ug/mL
							Acetophenone	1 ug/mL
							Aniline	1 ug/mL
							Anthracene	1 ug/mL
							Benzo[a]anthracene	1 ug/mL
							Benzo[a]pyrene	1 ug/mL
							Benzo[b]fluoranthene	1 ug/mL
							Benzo[g,h,i]perylene	1 ug/mL
							Benzo[k]fluoranthene	1 ug/mL
							Benzyl alcohol	1 ug/mL
							Bis(2-chloroethoxy)methane	1 ug/mL
							Bis(2-chloroethyl)ether	1 ug/mL
							Bis(2-ethylhexyl) phthalate	1 ug/mL
							Butyl benzyl phthalate	1 ug/mL
							Carbazole	1 ug/mL
							Chrysene	1 ug/mL
							Di-n-butyl phthalate	1 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Di-n-octyl phthalate	1 ug/mL
							Dibenz(a,h)anthracene	1 ug/mL
							Dibenzofuran	1 ug/mL
							Diethyl phthalate	1 ug/mL
							Dimethyl phthalate	1 ug/mL
							Fluoranthene	1 ug/mL
							Fluorene	1 ug/mL
							Hexachlorobenzene	1 ug/mL
							Hexachlorobutadiene	1 ug/mL
							Hexachlorocyclopentadiene	1 ug/mL
							Hexachloroethane	1 ug/mL
							Hexadecane	1 ug/mL
							Indeno[1,2,3-cd]pyrene	1 ug/mL
							Isophorone	1 ug/mL
							Methylphenol, 3 & 4	1 ug/mL
							n-Decane	1 ug/mL
							N-Nitrosodi-n-propylamine	1 ug/mL
							N-Nitrosodimethylamine	1 ug/mL
							n-Octadecane	1 ug/mL
							Naphthalene	1 ug/mL
							Nitrobenzene	1 ug/mL
							Pentachlorophenol	2 ug/mL
							Phenanthrene	1 ug/mL
							Phenol	1 ug/mL
							Pyrene	1 ug/mL
							Pyridine	1 ug/mL
							3,3'-Dichlorobenzidine	1 ug/mL
							Atrazine	1 ug/mL
							Benzidine	1 ug/mL
							Caprolactam	1 ug/mL
							Benzoic acid	2 ug/mL
							Indene	1 ug/mL
							N-Nitrosodiphenylamine	1 ug/mL
							Benzaldehyde	1 ug/mL
							2,3,5,6-Tetrachlorophenol	1 ug/mL
							2,6-Dichlorophenol	1 ug/mL
							7,12-Dimethylbenz(a)anthracene	1 ug/mL
							Methyl methanesulfonate	1 ug/mL
							2,4,6-Tribromophenol (Surr)	1 ug/mL
							2-Fluorobiphenyl	1 ug/mL
							2-Fluorophenol (Surr)	1 ug/mL
							Nitrobenzene-d5 (Surr)	1 ug/mL
							Phenol-d5 (Surr)	1 ug/mL
							Terphenyl-d14 (Surr)	1 ug/mL
							N-Nitrosopyrrolidine	1 ug/mL
.SVTAPITINTRNi_00001	05/25/14	05/25/13	MeCl2, Lot 833279	25 mL	SVLVIntstd_00003	5000 uL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00003	02/28/18		Restek, Lot A093676		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTOCKi_00001	12/25/13	05/25/13	MeCl2, Lot 833279	20 mL	SV2NAPAMINEs_00001	800 uL	2-Naphthylamine	40 ug/mL
					SVLVstd1_00005	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							Methylphenol, 3 & 4	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd2_00004	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd3_00005	800 uL	Benzoic acid	80 ug/mL
					SVLVstd4_00005	400 uL	Indene	40 ug/mL
					SVLVstd5_00007	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd6_00003	400 uL	Benzaldehyde	40 ug/mL
					SVLVSupstd2_00004	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					SVNNITROPYROs_00001	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..SV2NAPAMINEs_00001	04/30/14	Ultra Scientific, Lot CG-1087			(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..SVLVstd1_00005	09/30/14	Restek, Lot A094002			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							Methylphenol, 3 & 4	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SVLVstd2_00004	08/31/14		Restek, Lot A093775		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd3_00005	02/28/16		Restek, Lot A093441		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..SVLVstd4_00005	08/31/14		Restek, Lot A093730		(Purchased Reagent)		Indene	2000 ug/mL
..SVLVstd5_00007	02/28/15		Restek, Lot A093442		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd6_00003	08/31/14		Restek, Lot A093656		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
..SVLVSupstd2_00004	02/28/15		Restek, Lot A093658		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Methyl methanesulfonate	1000 ug/mL
..SVLVSURRSPK_00003	02/28/18	Restek, Lot A093638			(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..SVNNITROPYROs_00001	12/09/14	Absolute Standards, Lot 120909			(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD20i_00001	12/25/13	05/25/13	MeCl2, Lot 833279	1 mL	SVTAPITINTRNi_00001	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTOCKi_00001	250 uL	2-Naphthylamine	10 ug/mL
							1,1'-Biphenyl	10 ug/mL
							1,2,4,5-Tetrachlorobenzene	10 ug/mL
							1,2,4-Trichlorobenzene	10 ug/mL
							1,2-Dichlorobenzene	10 ug/mL
							1,3-Dichlorobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							1,4-Dichlorobenzene	10 ug/mL
							1,4-Dioxane	10 ug/mL
							1-Methylnaphthalene	10 ug/mL
							2,2'-oxybis[1-chloropropane]	10 ug/mL
							2,3,4,6-Tetrachlorophenol	10 ug/mL
							2,4,5-Trichlorophenol	10 ug/mL
							2,4,6-Trichlorophenol	10 ug/mL
							2,4-Dichlorophenol	10 ug/mL
							2,4-Dimethylphenol	10 ug/mL
							2,4-Dinitrophenol	20 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							2,6-Dinitrotoluene	10 ug/mL
							2-Chloronaphthalene	10 ug/mL
							2-Chlorophenol	10 ug/mL
							2-Methylnaphthalene	10 ug/mL
							2-Methylphenol	10 ug/mL
							2-Nitroaniline	10 ug/mL
							2-Nitrophenol	10 ug/mL
							3-Nitroaniline	10 ug/mL
							4,6-Dinitro-2-methylphenol	20 ug/mL
							4-Bromophenyl phenyl ether	10 ug/mL
							4-Chloro-3-methylphenol	10 ug/mL
							4-Chloroaniline	10 ug/mL
							4-Chlorophenyl phenyl ether	10 ug/mL
							4-Nitroaniline	10 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Nitrophenol	20 ug/mL
							Acenaphthene	10 ug/mL
							Acenaphthylene	10 ug/mL
							Acetophenone	10 ug/mL
							Aniline	10 ug/mL
							Anthracene	10 ug/mL
							Benzo[a]anthracene	10 ug/mL
							Benzo[a]pyrene	10 ug/mL
							Benzo[b]fluoranthene	10 ug/mL
							Benzo[g,h,i]perylene	10 ug/mL
							Benzo[k]fluoranthene	10 ug/mL
							Benzyl alcohol	10 ug/mL
							Bis(2-chloroethoxy)methane	10 ug/mL
							Bis(2-chloroethyl)ether	10 ug/mL
							Bis(2-ethylhexyl) phthalate	10 ug/mL
							Butyl benzyl phthalate	10 ug/mL
							Carbazole	10 ug/mL
							Chrysene	10 ug/mL
							Di-n-butyl phthalate	10 ug/mL
							Di-n-octyl phthalate	10 ug/mL
							Dibenz(a,h)anthracene	10 ug/mL
							Dibenzofuran	10 ug/mL
							Diethyl phthalate	10 ug/mL
							Dimethyl phthalate	10 ug/mL
							Fluoranthene	10 ug/mL
							Fluorene	10 ug/mL
							Hexachlorobenzene	10 ug/mL
							Hexachlorobutadiene	10 ug/mL
							Hexachlorocyclopentadiene	10 ug/mL
							Hexachloroethane	10 ug/mL
							Hexadecane	10 ug/mL
							Indeno[1,2,3-cd]pyrene	10 ug/mL
							Isophorone	10 ug/mL
							Methylphenol, 3 & 4	10 ug/mL
							n-Decane	10 ug/mL
							N-Nitrosodi-n-propylamine	10 ug/mL
							N-Nitrosodimethylamine	10 ug/mL
							n-Octadecane	10 ug/mL
							Naphthalene	10 ug/mL
							Nitrobenzene	10 ug/mL
							Pentachlorophenol	20 ug/mL
							Phenanthrene	10 ug/mL
							Phenol	10 ug/mL
							Pyrene	10 ug/mL
							Pyridine	10 ug/mL
							3,3'-Dichlorobenzidine	10 ug/mL
							Atrazine	10 ug/mL
							Benzidine	10 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Caprolactam	10 ug/mL
							Benzoic acid	20 ug/mL
							Indene	10 ug/mL
							N-Nitrosodiphenylamine	10 ug/mL
							Benzaldehyde	10 ug/mL
							2,3,5,6-Tetrachlorophenol	10 ug/mL
							2,6-Dichlorophenol	10 ug/mL
							7,12-Dimethylbenz(a)anthracene	10 ug/mL
							Methyl methanesulfonate	10 ug/mL
							2,4,6-Tribromophenol (Surr)	10 ug/mL
							2-Fluorobiphenyl	10 ug/mL
							2-Fluorophenol (Surr)	10 ug/mL
							Nitrobenzene-d5 (Surr)	10 ug/mL
							Phenol-d5 (Surr)	10 ug/mL
							Terphenyl-d14 (Surr)	10 ug/mL
							N-Nitrosopyrrolidine	10 ug/mL
.SVTAPITINTRNi_00001	05/25/14	05/25/13	MeCl2, Lot 833279	25 mL	SVLVIntstd_00003	5000 uL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00003	02/28/18	Restek, Lot A093676			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTOCKi_00001	12/25/13	05/25/13	MeCl2, Lot 833279	20 mL	SV2NAPAMINEs_00001	800 uL	2-Naphthylamine	40 ug/mL
					SVLVstd1_00005	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							Methylphenol, 3 & 4	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd2_00004	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd3_00005	800 uL	Benzoic acid	80 ug/mL
					SVLVstd4_00005	400 uL	Indene	40 ug/mL
					SVLVstd5_00007	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd6_00003	400 uL	Benzaldehyde	40 ug/mL
					SVLVSupstd2_00004	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					SVNNITROPYROs_00001	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..SV2NAPAMINEs_00001	04/30/14	Ultra Scientific, Lot CG-1087			(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..SVLVstd1_00005	09/30/14	Restek, Lot A094002			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							Methylphenol, 3 & 4	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodimethylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SVLVstd2_00004	08/31/14		Restek, Lot A093775		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd3_00005	02/28/16		Restek, Lot A093441		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..SVLVstd4_00005	08/31/14		Restek, Lot A093730		(Purchased Reagent)		Indene	2000 ug/mL
..SVLVstd5_00007	02/28/15		Restek, Lot A093442		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd6_00003	08/31/14		Restek, Lot A093656		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
..SVLVSupstd2_00004	02/28/15		Restek, Lot A093658		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Methyl methanesulfonate	1000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..SVNNITROPYROs_00001	12/09/14		Absolute Standards, Lot 120909		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD4.0i_00001	12/25/13	05/25/13	MeCl2, Lot 833279	1 mL	SVTAPITINTRNi_00001	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTOCKi_00001	50 uL	2-Naphthylamine	2 ug/mL
							1,1'-Biphenyl	2 ug/mL
							1,2,4,5-Tetrachlorobenzene	2 ug/mL
							1,2,4-Trichlorobenzene	2 ug/mL
							1,2-Dichlorobenzene	2 ug/mL
							1,3-Dichlorobenzene	2 ug/mL
							1,3-Dinitrobenzene	2 ug/mL
							1,4-Dichlorobenzene	2 ug/mL
							1,4-Dioxane	2 ug/mL
							1-Methylnaphthalene	2 ug/mL
							2,2'-oxybis[1-chloropropane]	2 ug/mL
							2,3,4,6-Tetrachlorophenol	2 ug/mL
							2,4,5-Trichlorophenol	2 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4,6-Trichlorophenol	2 ug/mL
							2,4-Dichlorophenol	2 ug/mL
							2,4-Dimethylphenol	2 ug/mL
							2,4-Dinitrophenol	4 ug/mL
							2,4-Dinitrotoluene	2 ug/mL
							2,6-Dinitrotoluene	2 ug/mL
							2-Chloronaphthalene	2 ug/mL
							2-Chlorophenol	2 ug/mL
							2-Methylnaphthalene	2 ug/mL
							2-Methylphenol	2 ug/mL
							2-Nitroaniline	2 ug/mL
							2-Nitrophenol	2 ug/mL
							3-Nitroaniline	2 ug/mL
							4,6-Dinitro-2-methylphenol	4 ug/mL
							4-Bromophenyl phenyl ether	2 ug/mL
							4-Chloro-3-methylphenol	2 ug/mL
							4-Chloroaniline	2 ug/mL
							4-Chlorophenyl phenyl ether	2 ug/mL
							4-Nitroaniline	2 ug/mL
							4-Nitrophenol	4 ug/mL
							Acenaphthene	2 ug/mL
							Acenaphthylene	2 ug/mL
							Acetophenone	2 ug/mL
							Aniline	2 ug/mL
							Anthracene	2 ug/mL
							Benzo[a]anthracene	2 ug/mL
							Benzo[a]pyrene	2 ug/mL
							Benzo[b]fluoranthene	2 ug/mL
							Benzo[g,h,i]perylene	2 ug/mL
							Benzo[k]fluoranthene	2 ug/mL
							Benzyl alcohol	2 ug/mL
							Bis(2-chloroethoxy)methane	2 ug/mL
							Bis(2-chloroethyl)ether	2 ug/mL
							Bis(2-ethylhexyl) phthalate	2 ug/mL
							Butyl benzyl phthalate	2 ug/mL
							Carbazole	2 ug/mL
							Chrysene	2 ug/mL
							Di-n-butyl phthalate	2 ug/mL
							Di-n-octyl phthalate	2 ug/mL
							Dibenz(a,h)anthracene	2 ug/mL
							Dibenzofuran	2 ug/mL
							Diethyl phthalate	2 ug/mL
							Dimethyl phthalate	2 ug/mL
							Fluoranthene	2 ug/mL
							Fluorene	2 ug/mL
							Hexachlorobenzene	2 ug/mL
							Hexachlorobutadiene	2 ug/mL
							Hexachlorocyclopentadiene	2 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachloroethane	2 ug/mL
							Hexadecane	2 ug/mL
							Indeno[1,2,3-cd]pyrene	2 ug/mL
							Isophorone	2 ug/mL
							Methylphenol, 3 & 4	2 ug/mL
							n-Decane	2 ug/mL
							N-Nitrosodi-n-propylamine	2 ug/mL
							N-Nitrosodimethylamine	2 ug/mL
							n-Octadecane	2 ug/mL
							Naphthalene	2 ug/mL
							Nitrobenzene	2 ug/mL
							Pentachlorophenol	4 ug/mL
							Phenanthrene	2 ug/mL
							Phenol	2 ug/mL
							Pyrene	2 ug/mL
							Pyridine	2 ug/mL
							3,3'-Dichlorobenzidine	2 ug/mL
							Atrazine	2 ug/mL
							Benzidine	2 ug/mL
							Caprolactam	2 ug/mL
							Benzoic acid	4 ug/mL
							Indene	2 ug/mL
							N-Nitrosodiphenylamine	2 ug/mL
							Benzaldehyde	2 ug/mL
							2,3,5,6-Tetrachlorophenol	2 ug/mL
							2,6-Dichlorophenol	2 ug/mL
							7,12-Dimethylbenz(a)anthracene	2 ug/mL
							Methyl methanesulfonate	2 ug/mL
							2,4,6-Tribromophenol (Surr)	2 ug/mL
							2-Fluorobiphenyl	2 ug/mL
							2-Fluorophenol (Surr)	2 ug/mL
							Nitrobenzene-d5 (Surr)	2 ug/mL
							Phenol-d5 (Surr)	2 ug/mL
							Terphenyl-d14 (Surr)	2 ug/mL
							N-Nitrosopyrrolidine	2 ug/mL
.SVTAPITINTRNi_00001	05/25/14	05/25/13	MeCl2, Lot 833279	25 mL	SVLVIntstd_00003	5000 uL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00003	02/28/18	Restek, Lot A093676			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTOCKi_00001	12/25/13	05/25/13	MeCl2, Lot 833279	20 mL	SV2NAPAMINEs_00001	800 uL	2-Naphthylamine	40 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					SVLVstd1_00005	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							Methylphenol, 3 & 4	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd2_00004	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd3_00005	800 uL	Benzoic acid	80 ug/mL
					SVLVstd4_00005	400 uL	Indene	40 ug/mL
					SVLVstd5_00007	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd6_00003	400 uL	Benzaldehyde	40 ug/mL
					SVLVSupstd2_00004	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					SVNNITROPYROs_00001	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..SV2NAPAMINEs_00001	04/30/14	Ultra Scientific, Lot CG-1087			(Purchased Reagent)		2-Naphthylamine	1000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..SVLVstd1_00005	09/30/14		Restek, Lot A094002		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							Methylphenol, 3 & 4	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SVLVstd2_00004	08/31/14		Restek, Lot A093775		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd3_00005	02/28/16		Restek, Lot A093441		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..SVLVstd4_00005	08/31/14		Restek, Lot A093730		(Purchased Reagent)		Indene	2000 ug/mL
..SVLVstd5_00007	02/28/15		Restek, Lot A093442		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd6_00003	08/31/14		Restek, Lot A093656		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
..SVLVSupstd2_00004	02/28/15		Restek, Lot A093658		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Methyl methanesulfonate	1000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..SVNNITROPYROs_00001	12/09/14		Absolute Standards, Lot 120909		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
SVTAPSTD40i_00001	12/25/13	05/25/13	MeCl2, Lot 833279	1 mL	SVTAPITINTRNi_00001	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTOCKi_00001	500 uL	2-Naphthylamine	20 ug/mL
							1,1'-Biphenyl	20 ug/mL
							1,2,4,5-Tetrachlorobenzene	20 ug/mL
							1,2,4-Trichlorobenzene	20 ug/mL
							1,2-Dichlorobenzene	20 ug/mL
							1,3-Dichlorobenzene	20 ug/mL
							1,3-Dinitrobenzene	20 ug/mL
							1,4-Dichlorobenzene	20 ug/mL
							1,4-Dioxane	20 ug/mL
							1-Methylnaphthalene	20 ug/mL
							2,2'-oxybis[1-chloropropane]	20 ug/mL
							2,3,4,6-Tetrachlorophenol	20 ug/mL
							2,4,5-Trichlorophenol	20 ug/mL
							2,4,6-Trichlorophenol	20 ug/mL
							2,4-Dichlorophenol	20 ug/mL
							2,4-Dimethylphenol	20 ug/mL
							2,4-Dinitrophenol	40 ug/mL
							2,4-Dinitrotoluene	20 ug/mL
							2,6-Dinitrotoluene	20 ug/mL
							2-Chloronaphthalene	20 ug/mL
							2-Chlorophenol	20 ug/mL
							2-Methylnaphthalene	20 ug/mL
							2-Methylphenol	20 ug/mL
							2-Nitroaniline	20 ug/mL
							2-Nitrophenol	20 ug/mL
							3-Nitroaniline	20 ug/mL
							4,6-Dinitro-2-methylphenol	40 ug/mL
							4-Bromophenyl phenyl ether	20 ug/mL
							4-Chloro-3-methylphenol	20 ug/mL
							4-Chloroaniline	20 ug/mL
							4-Chlorophenyl phenyl ether	20 ug/mL
							4-Nitroaniline	20 ug/mL
							4-Nitrophenol	40 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Acetophenone	20 ug/mL
							Aniline	20 ug/mL
							Anthracene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[k]fluoranthene	20 ug/mL
							Benzyl alcohol	20 ug/mL
							Bis(2-chloroethoxy)methane	20 ug/mL
							Bis(2-chloroethyl)ether	20 ug/mL
							Bis(2-ethylhexyl) phthalate	20 ug/mL
							Butyl benzyl phthalate	20 ug/mL
							Carbazole	20 ug/mL
							Chrysene	20 ug/mL
							Di-n-butyl phthalate	20 ug/mL
							Di-n-octyl phthalate	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Dibenzofuran	20 ug/mL
							Diethyl phthalate	20 ug/mL
							Dimethyl phthalate	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Hexachlorobenzene	20 ug/mL
							Hexachlorobutadiene	20 ug/mL
							Hexachlorocyclopentadiene	20 ug/mL
							Hexachloroethane	20 ug/mL
							Hexadecane	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Isophorone	20 ug/mL
							Methylphenol, 3 & 4	20 ug/mL
							n-Decane	20 ug/mL
							N-Nitrosodi-n-propylamine	20 ug/mL
							N-Nitrosodimethylamine	20 ug/mL
							n-Octadecane	20 ug/mL
							Naphthalene	20 ug/mL
							Nitrobenzene	20 ug/mL
							Pentachlorophenol	40 ug/mL
							Phenanthrene	20 ug/mL
							Phenol	20 ug/mL
							Pyrene	20 ug/mL
							Pyridine	20 ug/mL
							3,3'-Dichlorobenzidine	20 ug/mL
							Atrazine	20 ug/mL
							Benzidine	20 ug/mL
							Caprolactam	20 ug/mL
							Benzoic acid	40 ug/mL
							Indene	20 ug/mL
							N-Nitrosodiphenylamine	20 ug/mL
							Benzaldehyde	20 ug/mL
							2,3,5,6-Tetrachlorophenol	20 ug/mL
							2,6-Dichlorophenol	20 ug/mL
							7,12-Dimethylbenz(a)anthracene	20 ug/mL
							Methyl methanesulfonate	20 ug/mL
							2,4,6-Tribromophenol (Surr)	20 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Fluorobiphenyl	20 ug/mL
							2-Fluorophenol (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20 ug/mL
							Phenol-d5 (Surr)	20 ug/mL
							Terphenyl-d14 (Surr)	20 ug/mL
							N-Nitrosopyrrolidine	20 ug/mL
.SVTAPITINTRNi_00001	05/25/14	05/25/13	MeCl2, Lot 833279	25 mL	SVLVIntstd_00003	5000 uL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00003	02/28/18		Restek, Lot A093676		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTOCKi_00001	12/25/13	05/25/13	MeCl2, Lot 833279	20 mL	SV2NAPAMINEs_00001	800 uL	2-Naphthylamine	40 ug/mL
					SVLVstd1_00005	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							Methylphenol, 3 & 4	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd2_00004	400 uL	3,3'-Dichlorobenzidine	40 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd3_00005	800 uL	Benzoic acid	80 ug/mL
					SVLVstd4_00005	400 uL	Indene	40 ug/mL
					SVLVstd5_00007	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd6_00003	400 uL	Benzaldehyde	40 ug/mL
					SVLVSupstd2_00004	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					SVNNITROPYROs_00001	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..SV2NAPAMINEs_00001	04/30/14	Ultra Scientific, Lot CG-1087			(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..SVLVstd1_00005	09/30/14	Restek, Lot A094002			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							Methylphenol, 3 & 4	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SVLVstd2_00004	08/31/14		Restek, Lot A093775		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd3_00005	02/28/16		Restek, Lot A093441		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..SVLVstd4_00005	08/31/14		Restek, Lot A093730		(Purchased Reagent)		Indene	2000 ug/mL
..SVLVstd5_00007	02/28/15		Restek, Lot A093442		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd6_00003	08/31/14		Restek, Lot A093656		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
..SVLVSupstd2_00004	02/28/15		Restek, Lot A093658		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Methyl methanesulfonate	1000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..SVNNITROPYROs_00001	12/09/14		Absolute Standards, Lot 120909		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD60i_00001	12/25/13	05/25/13	MeCl2, Lot 833279	1 mL	SVTAPITINTRNi_00001	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTOCKi_00001	750 uL	2-Naphthylamine	30 ug/mL
							1,1'-Biphenyl	30 ug/mL
							1,2,4,5-Tetrachlorobenzene	30 ug/mL
							1,2,4-Trichlorobenzene	30 ug/mL
							1,2-Dichlorobenzene	30 ug/mL
							1,3-Dichlorobenzene	30 ug/mL
							1,3-Dinitrobenzene	30 ug/mL
							1,4-Dichlorobenzene	30 ug/mL
							1,4-Dioxane	30 ug/mL
							1-Methylnaphthalene	30 ug/mL
							2,2'-oxybis[1-chloropropane]	30 ug/mL
							2,3,4,6-Tetrachlorophenol	30 ug/mL
							2,4,5-Trichlorophenol	30 ug/mL
							2,4,6-Trichlorophenol	30 ug/mL
							2,4-Dichlorophenol	30 ug/mL
							2,4-Dimethylphenol	30 ug/mL
							2,4-Dinitrophenol	60 ug/mL
							2,4-Dinitrotoluene	30 ug/mL
							2,6-Dinitrotoluene	30 ug/mL
							2-Chloronaphthalene	30 ug/mL
							2-Chlorophenol	30 ug/mL
							2-Methylnaphthalene	30 ug/mL
							2-Methylphenol	30 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Nitroaniline	30 ug/mL
							2-Nitrophenol	30 ug/mL
							3-Nitroaniline	30 ug/mL
							4,6-Dinitro-2-methylphenol	60 ug/mL
							4-Bromophenyl phenyl ether	30 ug/mL
							4-Chloro-3-methylphenol	30 ug/mL
							4-Chloroaniline	30 ug/mL
							4-Chlorophenyl phenyl ether	30 ug/mL
							4-Nitroaniline	30 ug/mL
							4-Nitrophenol	60 ug/mL
							Acenaphthene	30 ug/mL
							Acenaphthylene	30 ug/mL
							Acetophenone	30 ug/mL
							Aniline	30 ug/mL
							Anthracene	30 ug/mL
							Benzo[a]anthracene	30 ug/mL
							Benzo[a]pyrene	30 ug/mL
							Benzo[b]fluoranthene	30 ug/mL
							Benzo[g,h,i]perylene	30 ug/mL
							Benzo[k]fluoranthene	30 ug/mL
							Benzyl alcohol	30 ug/mL
							Bis(2-chloroethoxy)methane	30 ug/mL
							Bis(2-chloroethyl)ether	30 ug/mL
							Bis(2-ethylhexyl) phthalate	30 ug/mL
							Butyl benzyl phthalate	30 ug/mL
							Carbazole	30 ug/mL
							Chrysene	30 ug/mL
							Di-n-butyl phthalate	30 ug/mL
							Di-n-octyl phthalate	30 ug/mL
							Dibenz(a,h)anthracene	30 ug/mL
							Dibenzofuran	30 ug/mL
							Diethyl phthalate	30 ug/mL
							Dimethyl phthalate	30 ug/mL
							Fluoranthene	30 ug/mL
							Fluorene	30 ug/mL
							Hexachlorobenzene	30 ug/mL
							Hexachlorobutadiene	30 ug/mL
							Hexachlorocyclopentadiene	30 ug/mL
							Hexachloroethane	30 ug/mL
							Hexadecane	30 ug/mL
							Indeno[1,2,3-cd]pyrene	30 ug/mL
							Isophorone	30 ug/mL
							Methylphenol, 3 & 4	30 ug/mL
							n-Decane	30 ug/mL
							N-Nitrosodi-n-propylamine	30 ug/mL
							N-Nitrosodimethylamine	30 ug/mL
							n-Octadecane	30 ug/mL
							Naphthalene	30 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Nitrobenzene	30 ug/mL
							Pentachlorophenol	60 ug/mL
							Phenanthrene	30 ug/mL
							Phenol	30 ug/mL
							Pyrene	30 ug/mL
							Pyridine	30 ug/mL
							3,3'-Dichlorobenzidine	30 ug/mL
							Atrazine	30 ug/mL
							Benzidine	30 ug/mL
							Caprolactam	30 ug/mL
							Benzoic acid	60 ug/mL
							Indene	30 ug/mL
							N-Nitrosodiphenylamine	30 ug/mL
							Benzaldehyde	30 ug/mL
							2,3,5,6-Tetrachlorophenol	30 ug/mL
							2,6-Dichlorophenol	30 ug/mL
							7,12-Dimethylbenz(a)anthracene	30 ug/mL
							Methyl methanesulfonate	30 ug/mL
							2,4,6-Tribromophenol (Surr)	30 ug/mL
							2-Fluorobiphenyl	30 ug/mL
							2-Fluorophenol (Surr)	30 ug/mL
							Nitrobenzene-d5 (Surr)	30 ug/mL
							Phenol-d5 (Surr)	30 ug/mL
							Terphenyl-d14 (Surr)	30 ug/mL
							N-Nitrosopyrrolidine	30 ug/mL
.SVTAPITINTRNi_00001	05/25/14	05/25/13	MeCl2, Lot 833279	25 mL	SVLVIntstd_00003	5000 uL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00003	02/28/18	Restek, Lot A093676			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTOCKi_00001	12/25/13	05/25/13	MeCl2, Lot 833279	20 mL	SV2NAPAMINEs_00001	800 uL	2-Naphthylamine	40 ug/mL
					SVLVstd1_00005	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							Methylphenol, 3 & 4	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd2_00004	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd3_00005	800 uL	Benzoic acid	80 ug/mL
					SVLVstd4_00005	400 uL	Indene	40 ug/mL
					SVLVstd5_00007	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd6_00003	400 uL	Benzaldehyde	40 ug/mL
					SVLVSupstd2_00004	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					SVNNITROPYROs_00001	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..SV2NAPAMINEs_00001	04/30/14	Ultra Scientific, Lot CG-1087			(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..SVLVstd1_00005	09/30/14	Restek, Lot A094002			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							Methylphenol, 3 & 4	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SVLVstd2_00004	08/31/14		Restek, Lot A093775		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd3_00005	02/28/16		Restek, Lot A093441		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..SVLVstd4_00005	08/31/14		Restek, Lot A093730		(Purchased Reagent)		Indene	2000 ug/mL
..SVLVstd5_00007	02/28/15		Restek, Lot A093442		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd6_00003	08/31/14		Restek, Lot A093656		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
..SVLVSupstd2_00004	02/28/15		Restek, Lot A093658		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL
							Methyl methanesulfonate	1000 ug/mL
..SVLVSURRSPK_00003	02/28/18		Restek, Lot A093638		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..SVNNITROPYROs_00001	12/09/14		Absolute Standards, Lot 120909		(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL
SVTAPSTD80i_00001	12/25/13	05/25/13	MeCl2, Lot 833279	1 mL	SVTAPITINTRNi_00001	10 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SVTAPITSTOCKi_00001	1000 uL	2-Naphthylamine	40 ug/mL
							1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichlorobenzene	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							Methylphenol, 3 & 4	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
							3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
							Benzoic acid	80 ug/mL
							Indene	40 ug/mL
							N-Nitrosodiphenylamine	40 ug/mL
							Benzaldehyde	40 ug/mL
							2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL
							Methyl methanesulfonate	40 ug/mL
							2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
							N-Nitrosopyrrolidine	40 ug/mL
.SVTAPITINTRNi_00001	05/25/14	05/25/13	MeCl2, Lot 833279	25 mL	SVLVIntstd_00003	5000 uL	1,4-Dichlorobenzene-d4	400 ug/mL
							Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Naphthalene-d8	400 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perylene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..SVLVIntstd_00003	02/28/18		Restek, Lot A093676		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SVTAPITSTOCKi_00001	12/25/13	05/25/13	MeCl2, Lot 833279	20 mL	SV2NAPAMINEs_00001	800 uL	2-Naphthylamine	40 ug/mL
					SVLVstd1_00005	800 uL	1,1'-Biphenyl	40 ug/mL
							1,2,4,5-Tetrachlorobenzene	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dinitrobenzene	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	40 ug/mL
							1-Methylnaphthalene	40 ug/mL
							2,2'-oxybis[1-chloropropane]	40 ug/mL
							2,3,4,6-Tetrachlorophenol	40 ug/mL
							2,4,5-Trichlorophenol	40 ug/mL
							2,4,6-Trichlorophenol	40 ug/mL
							2,4-Dichlorophenol	40 ug/mL
							2,4-Dimethylphenol	40 ug/mL
							2,4-Dinitrophenol	80 ug/mL
							2,4-Dinitrotoluene	40 ug/mL
							2,6-Dinitrotoluene	40 ug/mL
							2-Chloronaphthalene	40 ug/mL
							2-Chlorophenol	40 ug/mL
							2-Methylnaphthalene	40 ug/mL
							2-Methylphenol	40 ug/mL
							2-Nitroaniline	40 ug/mL
							2-Nitrophenol	40 ug/mL
							3-Nitroaniline	40 ug/mL
							4,6-Dinitro-2-methylphenol	80 ug/mL
							4-Bromophenyl phenyl ether	40 ug/mL
							4-Chloro-3-methylphenol	40 ug/mL
							4-Chloroaniline	40 ug/mL
							4-Chlorophenyl phenyl ether	40 ug/mL
							4-Nitroaniline	40 ug/mL
							4-Nitrophenol	80 ug/mL
							Acenaphthene	40 ug/mL
							Acenaphthylene	40 ug/mL
							Acetophenone	40 ug/mL
							Aniline	40 ug/mL
							Anthracene	40 ug/mL
							Benzo[a]anthracene	40 ug/mL
							Benzo[a]pyrene	40 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[b]fluoranthene	40 ug/mL
							Benzo[g,h,i]perylene	40 ug/mL
							Benzo[k]fluoranthene	40 ug/mL
							Benzyl alcohol	40 ug/mL
							Bis(2-chloroethoxy)methane	40 ug/mL
							Bis(2-chloroethyl)ether	40 ug/mL
							Bis(2-ethylhexyl) phthalate	40 ug/mL
							Butyl benzyl phthalate	40 ug/mL
							Carbazole	40 ug/mL
							Chrysene	40 ug/mL
							Di-n-butyl phthalate	40 ug/mL
							Di-n-octyl phthalate	40 ug/mL
							Dibenz(a,h)anthracene	40 ug/mL
							Dibenzofuran	40 ug/mL
							Diethyl phthalate	40 ug/mL
							Dimethyl phthalate	40 ug/mL
							Fluoranthene	40 ug/mL
							Fluorene	40 ug/mL
							Hexachlorobenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexachlorocyclopentadiene	40 ug/mL
							Hexachloroethane	40 ug/mL
							Hexadecane	40 ug/mL
							Indeno[1,2,3-cd]pyrene	40 ug/mL
							Isophorone	40 ug/mL
							Methylphenol, 3 & 4	40 ug/mL
							n-Decane	40 ug/mL
							N-Nitrosodi-n-propylamine	40 ug/mL
							N-Nitrosodimethylamine	40 ug/mL
							n-Octadecane	40 ug/mL
							Naphthalene	40 ug/mL
							Nitrobenzene	40 ug/mL
							Pentachlorophenol	80 ug/mL
							Phenanthrene	40 ug/mL
							Phenol	40 ug/mL
							Pyrene	40 ug/mL
							Pyridine	40 ug/mL
					SVLVstd2_00004	400 uL	3,3'-Dichlorobenzidine	40 ug/mL
							Atrazine	40 ug/mL
							Benzidine	40 ug/mL
							Caprolactam	40 ug/mL
					SVLVstd3_00005	800 uL	Benzoic acid	80 ug/mL
					SVLVstd4_00005	400 uL	Indene	40 ug/mL
					SVLVstd5_00007	400 uL	N-Nitrosodiphenylamine	40 ug/mL
					SVLVstd6_00003	400 uL	Benzaldehyde	40 ug/mL
					SVLVSupstd2_00004	800 uL	2,3,5,6-Tetrachlorophenol	40 ug/mL
							2,6-Dichlorophenol	40 ug/mL
							7,12-Dimethylbenz(a)anthracene	40 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl methanesulfonate	40 ug/mL
					SVLVSURRSPK_00003	160 uL	2,4,6-Tribromophenol (Surr)	40 ug/mL
							2-Fluorobiphenyl	40 ug/mL
							2-Fluorophenol (Surr)	40 ug/mL
							Nitrobenzene-d5 (Surr)	40 ug/mL
							Phenol-d5 (Surr)	40 ug/mL
							Terphenyl-d14 (Surr)	40 ug/mL
					SVNNITROPYROs_00001	800 uL	N-Nitrosopyrrolidine	40 ug/mL
..SV2NAPAMINEs_00001	04/30/14	Ultra Scientific, Lot CG-1087			(Purchased Reagent)		2-Naphthylamine	1000 ug/mL
..SVLVstd1_00005	09/30/14	Restek, Lot A094002			(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							Methylphenol, 3 & 4	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
..SVLVstd2_00004	08/31/14		Restek, Lot A093775		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Atrazine	2000 ug/mL
							Benzidine	2000 ug/mL
							Caprolactam	2000 ug/mL
..SVLVstd3_00005	02/28/16		Restek, Lot A093441		(Purchased Reagent)		Benzoic acid	2000 ug/mL
..SVLVstd4_00005	08/31/14		Restek, Lot A093730		(Purchased Reagent)		Indene	2000 ug/mL
..SVLVstd5_00007	02/28/15		Restek, Lot A093442		(Purchased Reagent)		N-Nitrosodiphenylamine	2000 ug/mL
..SVLVstd6_00003	08/31/14		Restek, Lot A093656		(Purchased Reagent)		Benzaldehyde	2000 ug/mL
..SVLVSupstd2_00004	02/28/15		Restek, Lot A093658		(Purchased Reagent)		2,3,5,6-Tetrachlorophenol	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							7,12-Dimethylbenz(a)anthracene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl methanesulfonate	1000 ug/mL
..SVLVSURRSPK_00003	02/28/18	Restek, Lot A093638			(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
..SVNNITROPYROs_00001	12/09/14	Absolute Standards, Lot 120909			(Purchased Reagent)		N-Nitrosopyrrolidine	1000 ug/mL

ULTRA SCIENTIFIC
Analytical Solutions

Certificate of Analysis

Decachlorobiphenyl Solution

Product Number: PPS-150 **Page:** 1 of 1

Lot Number: CC-3147Z **Lot Issue Date:** 03-Jan-2012 **Expiration Date:** 28-Feb-2015

This Certified Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
decachlorobiphenyl (BZ # 209)	002051-24-3	ER072304-02	1004 ± 5 µg/mL

Matrix: toluene

Storage: Store at Room Temperature (18-25° C)

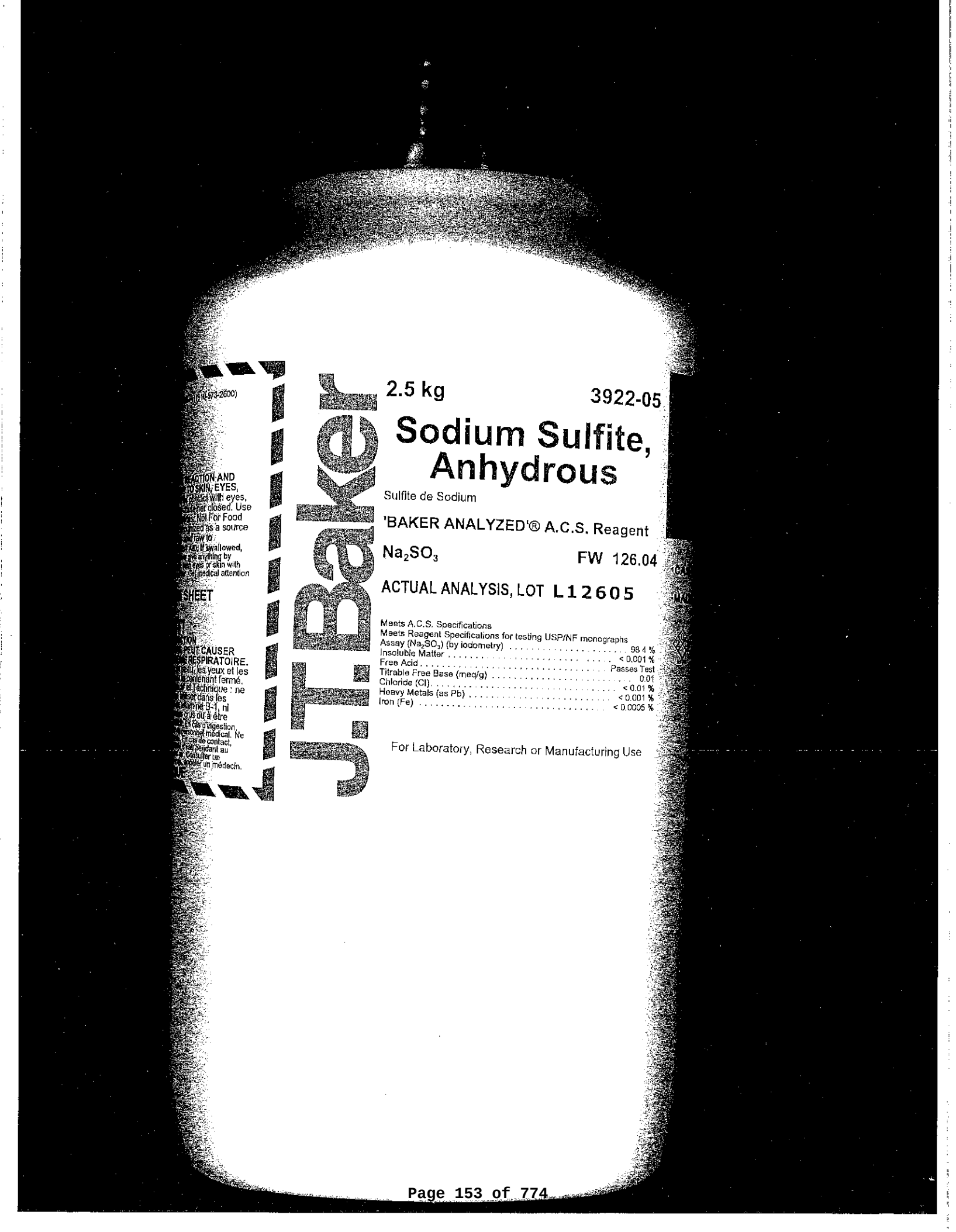
ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

A2LA ACCREDITED
ISO 17025:2005 Accredited A2LA Cert. No. 0851-01
ISO 9001:2008 Registered TUV USA, Inc. Cert. No. 09-1009

250 Smith Street, North Kingstown, RI 02852 USA
401-294-9400 Fax: 295-2330
www.ultrasci.com

William J. Leary
Quality Assurance Manager

10/25/2013


(610-573-2600)
ACTION AND
TO SKIN, EYES,
contact with eyes,
tainer closed. Use
Not For Food
ized as a source
Have to
If swallowed,
give anything by
eyes or skin with
of medical attention
SHEET
PEUT CAUSER
RESPIRATOIRE.
les yeux et les
contenant fermé.
et technique : ne
pas manger dans les
Vitamine B-1, ni
reçus ont à être
En cas d'ingestion,
personnel médical. Ne
En cas de contact,
rait pendant au
Consulter un
appeler un médecin.
J.T.Baker
2.5 kg
3922-05
Sodium Sulfite, Anhydrous
Sulfite de Sodium
'BAKER ANALYZED'® A.C.S. Reagent
Na_2SO_3
FW 126.04
ACTUAL ANALYSIS, LOT L12605
Meets A.C.S. Specifications
Meets Reagent Specifications for testing USP/NF monographs
Assay (Na_2SO_3) (by iodometry) 98.4 %
Insoluble Matter < 0.001 %
Free Acid Passes Test
Titrable Free Base (meq/g) 0.01
Chloride (Cl) < 0.01 %
Heavy Metals (as Pb) < 0.001 %
Iron (Fe) < 0.0005 %
For Laboratory, Research or Manufacturing Use

INV 4214-4223
4204-4213

ULTRA SCIENTIFIC
Analytical Solutions

Certificate of Analysis

2-Naphthylamine Solution

Product Number: EPA-1135 **Page:** 1 of 1

Lot Number: CG-1087 **Lot Issue Date:** Mar-2010 **Expiration Date:** Apr-2014

This Certified Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
2-naphthylamine	000091-59-8	01635CU	1002 ± 5 µg/mL

Matrix: methanol (methyl alcohol)

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

ISO 17025 Accredited A2LA Cert. No. 0851-01

ISO 9001:2000 Registered TUV USA, Inc. Cert. No. 06-1004

250 Smith Street, North Kingstown, RI 02852 USA
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William J. Leahy
Quality Assurance Manager

10/25/2013

RESTEK

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
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ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

5 VLV INT STD

Catalog No. : 567684 **Lot No.:** A093676

Description : 8270 Internal Standard

8270 Internal Standard 2,000µg/mL, Methylene Chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : February 2018 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dichlorobenzene-d4	2,000.0	µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 3855-82-1			+/- 92.7158	µg/mL	Unstressed
	Purity 99%			+/- 101.3766	µg/mL	Stressed
2	Naphthalene-d8	2,000.0	µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 1146-65-2			+/- 92.7158	µg/mL	Unstressed
	Purity 99%			+/- 101.3766	µg/mL	Stressed
3	Acenaphthene-d10	2,000.0	µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 15067-26-2			+/- 92.7163	µg/mL	Unstressed
	Purity 97%			+/- 101.3771	µg/mL	Stressed
4	Phenanthrene-d10	2,000.0	µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 1517-22-2			+/- 92.7158	µg/mL	Unstressed
	Purity 99%			+/- 101.3766	µg/mL	Stressed
5	Chrysene-d12	2,000.0	µg/mL	+/- 11.6281	µg/mL	Gravimetric
	CAS # 1719-03-5			+/- 92.7150	µg/mL	Unstressed
	Purity 98%			+/- 101.3758	µg/mL	Stressed
6	Perylene-d12	2,000.0	µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 1520-96-3			+/- 92.7158	µg/mL	Unstressed
	Purity 99%			+/- 101.3766	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Column:
30m x .25mm x .25um
Rtx-5 (cat.#10223)

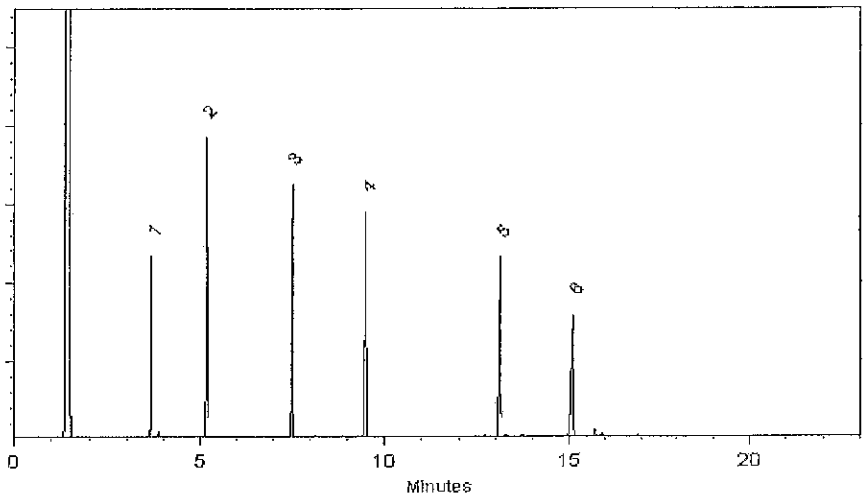
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



Jodi E. Breon - QA Analyst

Date Passed: 27-Feb-2013 Balance: 1128342313

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

RESTEK

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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CT# 18013-16 18907-92

Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

5VLVSTD1SEC

Catalog No. : 567672.sec **Lot No.:** A094002

Description : 8270 List 1 / Std #1 MegaMix

8270 List 1 / Std #1 MegaMix 500-2000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 2014 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dioxane **CAS #** 123-91-1.SEC **Purity** 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Pyridine **CAS #** 110-86-1.SEC **Purity** 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	N-Nitrosodimethylamine **CAS #** 62-75-9.SEC **Purity** 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	Aniline **CAS #** 62-53-3.SEC **Purity** 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Phenol **CAS #** 108-95-2.SEC **Purity** 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Bis(2-chloroethyl)ether **CAS #** 111-44-4.SEC **Purity** 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	2-Chlorophenol **CAS #** 95-57-8.SEC **Purity** 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
8	1,3-Dichlorobenzene **CAS #** 541-73-1.SEC **Purity** 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,4-Dichlorobenzene **CAS #** 106-46-7.SEC **Purity** 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

10	1,2-Dichlorobenzene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 95-50-1.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
11	Benzyl alcohol	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 100-51-6.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
12	Bis(2-chloroisopropyl)ether	720.0	µg/mL	+/-	4.1861	µg/mL	Gravimetric
	CAS # 108-60-1.SEC			+/-	6.3329	µg/mL	Unstressed
	Purity 72%			+/-	12.5198	µg/mL	Stressed
13	2-Methylphenol (o-cresol)	1,000.0	µg/mL	+/-	5.8140	µg/mL	Gravimetric
	CAS # 95-48-7.SEC			+/-	8.7956	µg/mL	Unstressed
	Purity 98%			+/-	17.3885	µg/mL	Stressed
14	Acetophenone	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 98-86-2.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
15	Hexachloroethane	1,000.0	µg/mL	+/-	5.8140	µg/mL	Gravimetric
	CAS # 67-72-1.SEC			+/-	8.7956	µg/mL	Unstressed
	Purity 98%			+/-	17.3885	µg/mL	Stressed
16	N-Nitroso-di-n-propylamine	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 621-64-7.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
17	4-Methylphenol (p-cresol)	500.0	µg/mL	+/-	2.9138	µg/mL	Gravimetric
	CAS # 106-44-5.SEC			+/-	4.4023	µg/mL	Unstressed
	Purity 99%			+/-	8.6966	µg/mL	Stressed
18	3-Methylphenol (m-cresol)	500.0	µg/mL	+/-	2.9138	µg/mL	Gravimetric
	CAS # 108-39-4.SEC			+/-	4.4023	µg/mL	Unstressed
	Purity 99%			+/-	8.6966	µg/mL	Stressed
19	n-Decane (C10)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 124-18-5.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
20	n-Octadecane (C18)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 593-45-3.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
21	Nitrobenzene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 98-95-3.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
22	Isophorone	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 78-59-1.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
23	2-Nitrophenol	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 88-75-5.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
24	2,4-Dimethylphenol	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 105-67-9.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
25	Bis(2-chloroethoxy)methane	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 111-91-1			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
26	2,4-Dichlorophenol	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 120-83-2.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
27	1,2,4-Trichlorobenzene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 120-82-1.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
28	Naphthalene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 91-20-3.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed

29	4-Chloroaniline	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 106-47-8.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
30	Hexachlorobutadiene	1,000.0	µg/mL	+/-	5.8139	µg/mL	Gravimetric
	CAS # 87-68-3.SEC			+/-	8.7954	µg/mL	Unstressed
	Purity 97%			+/-	17.3881	µg/mL	Stressed
31	2-Methylnaphthalene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 91-57-6.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
32	4-Chloro-3-methylphenol	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 59-50-7.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
33	1-Methylnaphthalene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 90-12-0.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 95-94-3.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
35	Hexachlorocyclopentadiene	1,000.0	µg/mL	+/-	5.8140	µg/mL	Gravimetric
	CAS # 77-47-4.SEC			+/-	8.7956	µg/mL	Unstressed
	Purity 98%			+/-	17.3885	µg/mL	Stressed
36	2,4,6-Trichlorophenol	1,000.0	µg/mL	+/-	5.8140	µg/mL	Gravimetric
	CAS # 88-06-2.SEC			+/-	8.7956	µg/mL	Unstressed
	Purity 98%			+/-	17.3885	µg/mL	Stressed
37	2,4,5-Trichlorophenol	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 95-95-4.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
38	2-Chloronaphthalene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 91-58-7.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
39	Biphenyl	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 92-52-4.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
40	2-Nitroaniline	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 88-74-4.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
41	Acenaphthylene	1,000.0	µg/mL	+/-	5.8139	µg/mL	Gravimetric
	CAS # 208-96-8.SEC			+/-	8.7954	µg/mL	Unstressed
	Purity 97%			+/-	17.3881	µg/mL	Stressed
42	1,3-Dinitrobenzene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 99-65-0.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
43	Dimethylphthalate	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 131-11-3.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
44	2,6-Dinitrotoluene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 606-20-2.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
45	Acenaphthene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 83-32-9.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
46	3-Nitroaniline	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 99-09-2.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
47	2,4-Dinitrophenol	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 51-28-5.SEC			+/-	17.5913	µg/mL	Unstressed
	Purity 99%			+/-	34.7772	µg/mL	Stressed

48	Dibenzofuran	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 132-64-9.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
49	2,4-Dinitrotoluene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 121-14-2.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
50	4-Nitrophenol	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 100-02-7.SEC			+/-	17.5913	µg/mL	Unstressed
	Purity 99%			+/-	34.7772	µg/mL	Stressed
51	2,3,4,6-Tetrachlorophenol	1,000.0	µg/mL	+/-	5.8140	µg/mL	Gravimetric
	CAS # 58-90-2.SEC			+/-	8.7956	µg/mL	Unstressed
	Purity 98%			+/-	17.3885	µg/mL	Stressed
52	Fluorene	1,000.0	µg/mL	+/-	5.8140	µg/mL	Gravimetric
	CAS # 86-73-7.SEC			+/-	8.7956	µg/mL	Unstressed
	Purity 98%			+/-	17.3885	µg/mL	Stressed
53	4-Chlorophenyl phenyl ether	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 7005-72-3.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
54	Diethylphthalate	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 84-66-2.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
55	4-Nitroaniline	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 100-01-6.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
56	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 534-52-1.SEC			+/-	17.5912	µg/mL	Unstressed
	Purity 98%			+/-	34.7769	µg/mL	Stressed
57	Azobenzene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 103-33-3.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
58	4-Bromophenyl phenyl ether	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 101-55-3.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
59	Hexachlorobenzene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 118-74-1.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
60	Pentachlorophenol	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 87-86-5.SEC			+/-	17.5913	µg/mL	Unstressed
	Purity 99%			+/-	34.7772	µg/mL	Stressed
61	Phenanthrene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 85-01-8.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
62	Anthracene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 120-12-7.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
63	n-Hexadecane (C16)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 544-76-3.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
64	Carbazole	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 86-74-8.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
65	Di-n-butylphthalate	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 84-74-2.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
66	Fluoranthene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 206-44-0.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed

67	Pyrene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 129-00-0.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
68	Benzyl butyl phthalate	1,000.0	µg/mL	+/-	5.8140	µg/mL	Gravimetric
	CAS # 85-68-7.SEC			+/-	8.7956	µg/mL	Unstressed
	Purity 98%			+/-	17.3885	µg/mL	Stressed
69	Benz(a)anthracene	1,000.0	µg/mL	+/-	5.8140	µg/mL	Gravimetric
	CAS # 56-55-3.SEC			+/-	8.7956	µg/mL	Unstressed
	Purity 98%			+/-	17.3885	µg/mL	Stressed
70	chrysene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 218-01-9.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
71	Bis(2-ethylhexyl)phthalate	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 117-81-7.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
72	Di-n-octyl phthalate	1,000.0	µg/mL	+/-	5.8140	µg/mL	Gravimetric
	CAS # 117-84-0.SEC			+/-	8.7956	µg/mL	Unstressed
	Purity 98%			+/-	17.3885	µg/mL	Stressed
73	Benzo(b)fluoranthene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 205-99-2.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
74	Benzo(k)fluoranthene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 207-08-9.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
75	Benzo(a)pyrene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 50-32-8.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
76	Indeno(1,2,3-cd)pyrene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 193-39-5.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
77	Dibenz(a,h)anthracene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 53-70-3.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
78	Benzo(g,h,i)perylene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 191-24-2			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Specific Reference Material Notes:
The Bis(2-chloroisopropyl)ether contains a 28% impurity of Propane, 1,1'oxybis,, 3-chloro.

Column:
30m x .25mm x .25um
Rtx-5 (cat.#10223)

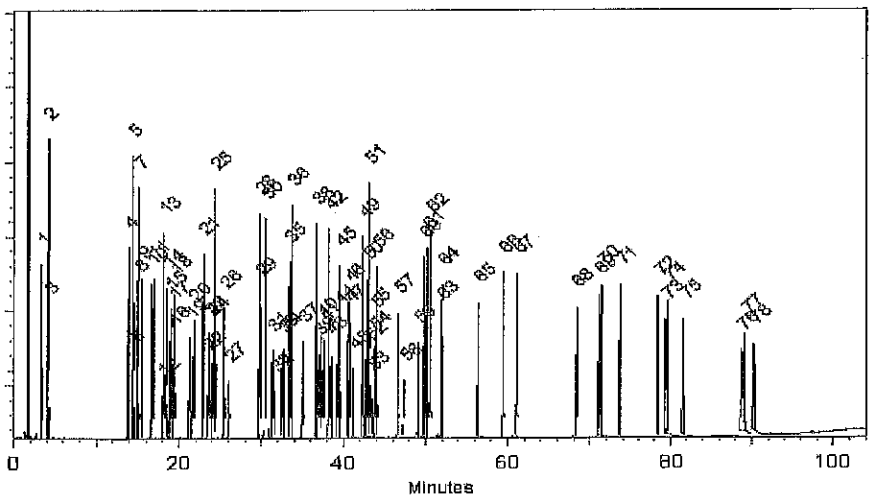
Carrier Gas:
hydrogen-constant pressure 10 psi

Temp. Program:
35°C (hold 3 min.) to 330°C
@ 3°C/min. (hold 3 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
FID



Jennifer L. Pollino - QC Analyst

Date Passed: 27-Mar-2013 Balance: 1128353505

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
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Fax: (814)353-1309
www.restek.com

CT# 18013-16 18907-921

Certificate of Analysis

ACCREDITED ISO Guide 34 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

5VLVSTD1SEC

Catalog No. : 567672.sec **Lot No.:** A094002

Description : 8270 List 1 / Std #1 MegaMix

8270 List 1 / Std #1 MegaMix 500-2000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 2014 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dioxane **CAS #** 123-91-1.SEC **Purity** 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Pyridine **CAS #** 110-86-1.SEC **Purity** 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	N-Nitrosodimethylamine **CAS #** 62-75-9.SEC **Purity** 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	Aniline **CAS #** 62-53-3.SEC **Purity** 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Phenol **CAS #** 108-95-2.SEC **Purity** 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Bis(2-chloroethyl)ether **CAS #** 111-44-4.SEC **Purity** 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	2-Chlorophenol **CAS #** 95-57-8.SEC **Purity** 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
8	1,3-Dichlorobenzene **CAS #** 541-73-1.SEC **Purity** 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,4-Dichlorobenzene **CAS #** 106-46-7.SEC **Purity** 99%	1,000.0 µg/mL	+/- 5.8141 +/- 8.7957 +/- 17.3886	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

10	1,2-Dichlorobenzene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 95-50-1.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
11	Benzyl alcohol	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 100-51-6.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
12	Bis(2-chloroisopropyl)ether	720.0	µg/mL	+/-	4.1861	µg/mL	Gravimetric
	CAS # 108-60-1.SEC			+/-	6.3329	µg/mL	Unstressed
	Purity 72%			+/-	12.5198	µg/mL	Stressed
13	2-Methylphenol (o-cresol)	1,000.0	µg/mL	+/-	5.8140	µg/mL	Gravimetric
	CAS # 95-48-7.SEC			+/-	8.7956	µg/mL	Unstressed
	Purity 98%			+/-	17.3885	µg/mL	Stressed
14	Acetophenone	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 98-86-2.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
15	Hexachloroethane	1,000.0	µg/mL	+/-	5.8140	µg/mL	Gravimetric
	CAS # 67-72-1.SEC			+/-	8.7956	µg/mL	Unstressed
	Purity 98%			+/-	17.3885	µg/mL	Stressed
16	N-Nitroso-di-n-propylamine	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 621-64-7.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
17	4-Methylphenol (p-cresol)	500.0	µg/mL	+/-	2.9138	µg/mL	Gravimetric
	CAS # 106-44-5.SEC			+/-	4.4023	µg/mL	Unstressed
	Purity 99%			+/-	8.6966	µg/mL	Stressed
18	3-Methylphenol (m-cresol)	500.0	µg/mL	+/-	2.9138	µg/mL	Gravimetric
	CAS # 108-39-4.SEC			+/-	4.4023	µg/mL	Unstressed
	Purity 99%			+/-	8.6966	µg/mL	Stressed
19	n-Decane (C10)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 124-18-5.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
20	n-Octadecane (C18)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 593-45-3.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
21	Nitrobenzene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 98-95-3.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
22	Isophorone	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 78-59-1.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
23	2-Nitrophenol	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 88-75-5.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
24	2,4-Dimethylphenol	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 105-67-9.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
25	Bis(2-chloroethoxy)methane	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 111-91-1			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
26	2,4-Dichlorophenol	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 120-83-2.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
27	1,2,4-Trichlorobenzene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 120-82-1.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
28	Naphthalene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 91-20-3.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed

29	4-Chloroaniline	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 106-47-8.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
30	Hexachlorobutadiene	1,000.0	µg/mL	+/-	5.8139	µg/mL	Gravimetric
	CAS # 87-68-3.SEC			+/-	8.7954	µg/mL	Unstressed
	Purity 97%			+/-	17.3881	µg/mL	Stressed
31	2-Methylnaphthalene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 91-57-6.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
32	4-Chloro-3-methylphenol	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 59-50-7.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
33	1-Methylnaphthalene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 90-12-0.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 95-94-3.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
35	Hexachlorocyclopentadiene	1,000.0	µg/mL	+/-	5.8140	µg/mL	Gravimetric
	CAS # 77-47-4.SEC			+/-	8.7956	µg/mL	Unstressed
	Purity 98%			+/-	17.3885	µg/mL	Stressed
36	2,4,6-Trichlorophenol	1,000.0	µg/mL	+/-	5.8140	µg/mL	Gravimetric
	CAS # 88-06-2.SEC			+/-	8.7956	µg/mL	Unstressed
	Purity 98%			+/-	17.3885	µg/mL	Stressed
37	2,4,5-Trichlorophenol	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 95-95-4.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
38	2-Chloronaphthalene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 91-58-7.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
39	Biphenyl	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 92-52-4.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
40	2-Nitroaniline	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 88-74-4.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
41	Acenaphthylene	1,000.0	µg/mL	+/-	5.8139	µg/mL	Gravimetric
	CAS # 208-96-8.SEC			+/-	8.7954	µg/mL	Unstressed
	Purity 97%			+/-	17.3881	µg/mL	Stressed
42	1,3-Dinitrobenzene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 99-65-0.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
43	Dimethylphthalate	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 131-11-3.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
44	2,6-Dinitrotoluene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 606-20-2.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
45	Acenaphthene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 83-32-9.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
46	3-Nitroaniline	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 99-09-2.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
47	2,4-Dinitrophenol	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 51-28-5.SEC			+/-	17.5913	µg/mL	Unstressed
	Purity 99%			+/-	34.7772	µg/mL	Stressed

48	Dibenzofuran	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 132-64-9.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
49	2,4-Dinitrotoluene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 121-14-2.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
50	4-Nitrophenol	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 100-02-7.SEC			+/-	17.5913	µg/mL	Unstressed
	Purity 99%			+/-	34.7772	µg/mL	Stressed
51	2,3,4,6-Tetrachlorophenol	1,000.0	µg/mL	+/-	5.8140	µg/mL	Gravimetric
	CAS # 58-90-2.SEC			+/-	8.7956	µg/mL	Unstressed
	Purity 98%			+/-	17.3885	µg/mL	Stressed
52	Fluorene	1,000.0	µg/mL	+/-	5.8140	µg/mL	Gravimetric
	CAS # 86-73-7.SEC			+/-	8.7956	µg/mL	Unstressed
	Purity 98%			+/-	17.3885	µg/mL	Stressed
53	4-Chlorophenyl phenyl ether	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 7005-72-3.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
54	Diethylphthalate	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 84-66-2.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
55	4-Nitroaniline	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 100-01-6.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
56	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 534-52-1.SEC			+/-	17.5912	µg/mL	Unstressed
	Purity 98%			+/-	34.7769	µg/mL	Stressed
57	Azobenzene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 103-33-3.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
58	4-Bromophenyl phenyl ether	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 101-55-3.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
59	Hexachlorobenzene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 118-74-1.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
60	Pentachlorophenol	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 87-86-5.SEC			+/-	17.5913	µg/mL	Unstressed
	Purity 99%			+/-	34.7772	µg/mL	Stressed
61	Phenanthrene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 85-01-8.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
62	Anthracene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 120-12-7.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
63	n-Hexadecane (C16)	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 544-76-3.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
64	Carbazole	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 86-74-8.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
65	Di-n-butylphthalate	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 84-74-2.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
66	Fluoranthene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 206-44-0.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed

67	Pyrene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 129-00-0.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
68	Benzyl butyl phthalate	1,000.0	µg/mL	+/-	5.8140	µg/mL	Gravimetric
	CAS # 85-68-7.SEC			+/-	8.7956	µg/mL	Unstressed
	Purity 98%			+/-	17.3885	µg/mL	Stressed
69	Benz(a)anthracene	1,000.0	µg/mL	+/-	5.8140	µg/mL	Gravimetric
	CAS # 56-55-3.SEC			+/-	8.7956	µg/mL	Unstressed
	Purity 98%			+/-	17.3885	µg/mL	Stressed
70	chrysene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 218-01-9.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
71	Bis(2-ethylhexyl)phthalate	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 117-81-7.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
72	Di-n-octyl phthalate	1,000.0	µg/mL	+/-	5.8140	µg/mL	Gravimetric
	CAS # 117-84-0.SEC			+/-	8.7956	µg/mL	Unstressed
	Purity 98%			+/-	17.3885	µg/mL	Stressed
73	Benzo(b)fluoranthene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 205-99-2.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
74	Benzo(k)fluoranthene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 207-08-9.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
75	Benzo(a)pyrene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 50-32-8.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
76	Indeno(1,2,3-cd)pyrene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 193-39-5.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
77	Dibenz(a,h)anthracene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 53-70-3.SEC			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed
78	Benzo(g,h,i)perylene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 191-24-2			+/-	8.7957	µg/mL	Unstressed
	Purity 99%			+/-	17.3886	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Specific Reference Material Notes:
The Bis(2-chloroisopropyl)ether contains a 28% impurity of Propane, 1,1'oxybis,, 3-chloro.

Column:
30m x .25mm x .25um
Rtx-5 (cat.#10223)

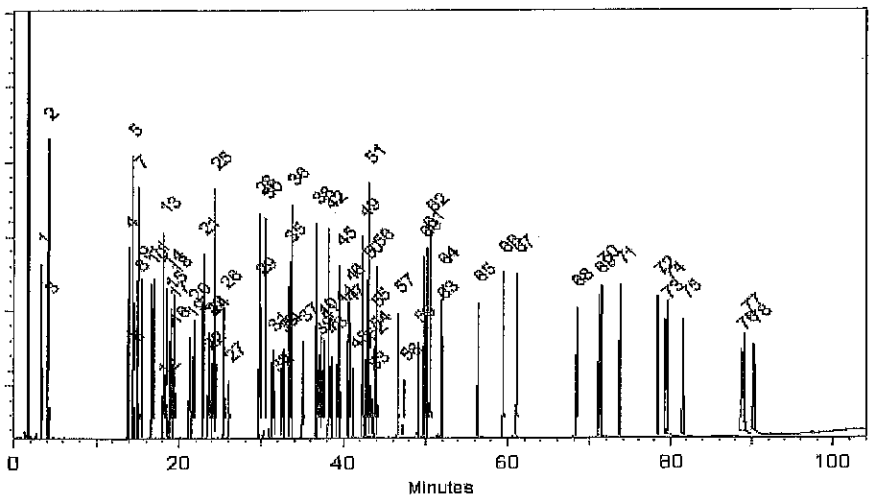
Carrier Gas:
hydrogen-constant pressure 10 psi

Temp. Program:
35°C (hold 3 min.) to 330°C
@ 3°C/min. (hold 3 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
FID



Jennifer L. Pollino - QC Analyst

Date Passed: 27-Mar-2013 Balance: 1128353505

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

SVLVSTD2SEC

Catalog No. : 567673.sec **Lot No.:** A093775

Description : 8270 List 1 / Std #2 Amines

8270 List 1 / Std #2 Amines 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : August 2014 **Storage:** 10°C or colder

Handling: Contains carcinogen

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	epsilon-Caprolactam	2,000.0 µg/mL	+/- 11.6282 µg/mL	Gravimetric
	CAS # 105-60-2.SEC		+/- 17.5913 µg/mL	Unstressed
	Purity 99%		+/- 34.7772 µg/mL	Stressed
2	Atrazine	2,000.0 µg/mL	+/- 11.6282 µg/mL	Gravimetric
	CAS # 1912-24-9.SEC		+/- 17.5913 µg/mL	Unstressed
	Purity 99%		+/- 34.7772 µg/mL	Stressed
3	Benzidine	2,000.0 µg/mL	+/- 11.6282 µg/mL	Gravimetric
	CAS # 92-87-5.SEC		+/- 17.5913 µg/mL	Unstressed
	Purity 99%		+/- 34.7772 µg/mL	Stressed
4	3,3'-Dichlorobenzidine	2,000.0 µg/mL	+/- 11.6282 µg/mL	Gravimetric
	CAS # 91-94-1.SEC		+/- 17.5913 µg/mL	Unstressed
	Purity 99%		+/- 34.7772 µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Column:
30m x .25mm x .25um
Rtx-5 (cat.#10223)

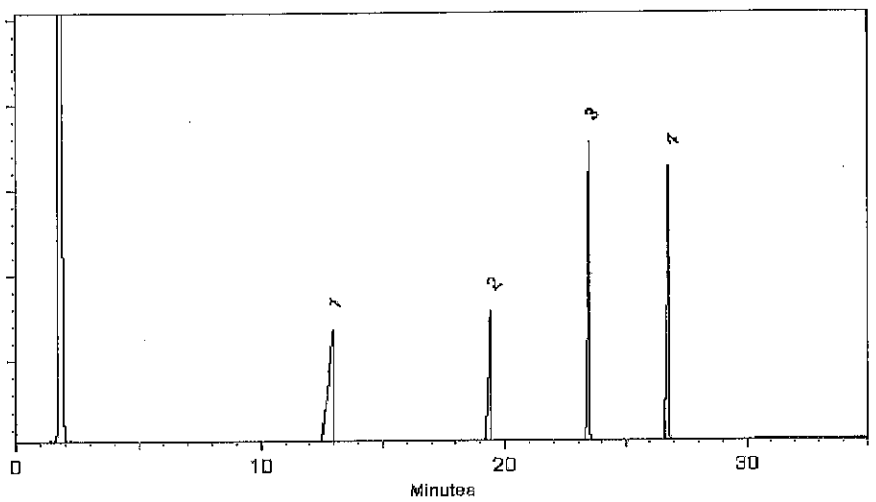
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



Jodi E. Breon - QA Analyst

Date Passed: 11-Mar-2013 Balance: 1128353505

Manufactured under Restek's ISO 9001:2008
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Certificate #FM 80397

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

5 VLV STD35FC

Catalog No. : 567674.sec **Lot No.:** A093654

Description : 8270 List 1 / Std #3 Benzoic Acid

8270 List 1 / Std #3 Benzoic Acid 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : February 2016 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Benzoic acid	2,000.0 µg/mL	+/- 11.6284	µg/mL	Gravimetric
	CAS # 65-85-0.SEC		+/- 96.5270	µg/mL	Unstressed
	Purity 97%		+/- 96.6098	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

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5V LVSIPSTD2SEC

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Catalog No. : 567679.sec **Lot No.:** A093864

Description : 8270 List 2 / Std #2

8270 List 2 / Std #2 1,000 ug/ml, Methylene Chloride, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 2015 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	Methyl methanesulfonate	1,000.0	µg/mL	+/- 5.8686	µg/mL	Gravimetric
	CAS # 66-27-3.SEC			+/- 34.5180	µg/mL	Unstressed
	Purity 99%			+/- 35.6973	µg/mL	Stressed
2	Ethyl methanesulfonate	1,000.0	µg/mL	+/- 5.8686	µg/mL	Gravimetric
	CAS # 62-50-0.SEC			+/- 34.5180	µg/mL	Unstressed
	Purity 99%			+/- 35.6973	µg/mL	Stressed
3	Pentachloroethane	1,000.1	µg/mL	+/- 5.8691	µg/mL	Gravimetric
	CAS # 76-01-7.SEC			+/- 34.5211	µg/mL	Unstressed
	Purity 98%			+/- 35.7006	µg/mL	Stressed
4	2,6-Dichlorophenol	1,000.0	µg/mL	+/- 5.8686	µg/mL	Gravimetric
	CAS # 87-65-0.SEC			+/- 34.5180	µg/mL	Unstressed
	Purity 99%			+/- 35.6973	µg/mL	Stressed
5	Hexachloropropene	1,000.1	µg/mL	+/- 5.8691	µg/mL	Gravimetric
	CAS # 1888-71-7.SEC			+/- 34.5211	µg/mL	Unstressed
	Purity 98%			+/- 35.7006	µg/mL	Stressed
6	Isosafrole (cis & trans)	1,000.1	µg/mL	+/- 5.8691	µg/mL	Gravimetric
	CAS # 120-58-1.SEC			+/- 34.5211	µg/mL	Unstressed
	Purity 98%			+/- 35.7006	µg/mL	Stressed
7	1-Chloronaphthalene	1,000.0	µg/mL	+/- 5.8686	µg/mL	Gravimetric
	CAS # 90-13-1			+/- 34.5180	µg/mL	Unstressed
	Purity 99%			+/- 35.6973	µg/mL	Stressed
8	1,4-Naphthoquinone	1,000.0	µg/mL	+/- 5.8686	µg/mL	Gravimetric
	CAS # 130-15-4.SEC			+/- 34.5180	µg/mL	Unstressed
	Purity 99%			+/- 35.6973	µg/mL	Stressed
9	Pentachlorobenzene	1,000.0	µg/mL	+/- 5.8686	µg/mL	Gravimetric
	CAS # 608-93-5.SEC			+/- 34.5180	µg/mL	Unstressed
	Purity 99%			+/- 35.6973	µg/mL	Stressed

10	2,3,5,6-Tetrachlorophenol	1,000.0	µg/mL	+/-	5.8686	µg/mL	Gravimetric
	CAS # 935-95-5.SEC			+/-	34.5180	µg/mL	Unstressed
	Purity 99%			+/-	35.6973	µg/mL	Stressed
11	Dinoseb	1,000.0	µg/mL	+/-	5.8686	µg/mL	Gravimetric
	CAS # 88-85-7.SEC			+/-	34.5180	µg/mL	Unstressed
	Purity 99%			+/-	35.6973	µg/mL	Stressed
12	Isodrin	1,000.1	µg/mL	+/-	5.8691	µg/mL	Gravimetric
	CAS # 465-73-6			+/-	34.5211	µg/mL	Unstressed
	Purity 98%			+/-	35.7006	µg/mL	Stressed
13	Chlorobenzilate	1,000.0	µg/mL	+/-	5.8686	µg/mL	Gravimetric
	CAS # 510-15-6.SEC			+/-	34.5180	µg/mL	Unstressed
	Purity 99%			+/-	35.6973	µg/mL	Stressed
14	7,12-Dimethylbenz(a)anthracene	1,000.1	µg/mL	+/-	5.8691	µg/mL	Gravimetric
	CAS # 57-97-6.SEC			+/-	34.5211	µg/mL	Unstressed
	Purity 98%			+/-	35.7006	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Column:
30m x .25mm x .25um
Rtx-5 (cat.#10223)

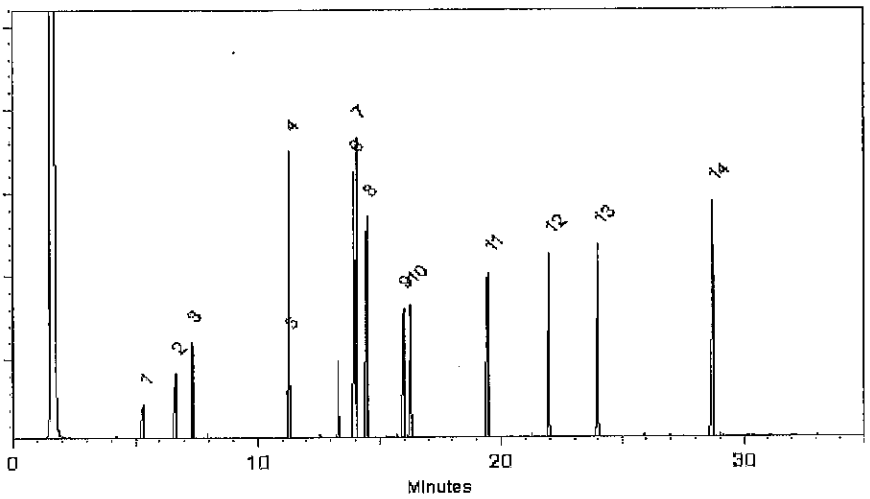
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



Jodi E. Breon - QA Analyst

Date Passed: 11-Mar-2013 **Balance:** 1128353505

Manufactured under Restek's ISO 9001:2008
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5 VLV STD3

Catalog No. : 567674 **Lot No.:** A093441

Description : 8270 List 1 / Std #3 Benzoic Acid

8270 List 1 / Std #3 Benzoic Acid 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : February 2016 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)	
1	Benzoic acid	2,000.0 µg/mL ✓	+/- 11.6282 µg/mL	Gravimetric
	CAS # 65-85-0 ✓		+/- 96.5249 µg/mL	Unstressed
	Purity 99%		+/- 96.6077 µg/mL	Stressed

Solvent: Methylene Chloride ✓
CAS # 75-09-2
Purity 99%

Column:
30m x .25mm x .25um
Rtx-5 (cat.#10223)

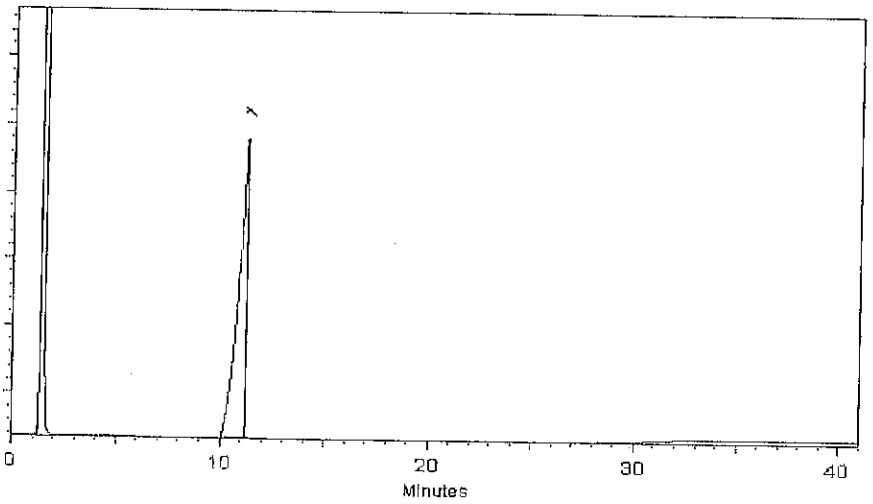
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



Jodi E. Breon - QA Analyst

Date Passed: 22-Feb-2013 **Balance:** 1128342313

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Certificate #FM 80397

CTH 786665 64 66 67 68 787805 08 07 06 01

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SVLVSTD/SEC

Catalog No. : 567675.sec **Lot No.:** A093668

Description : 8270 List 1 / Std #4 Indene

8270 List 1 / Std #4 Indene 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : August 2014 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Indene	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 95-13-6,SEC		+/- 24.1076	µg/mL	Unstressed
	Purity 99%		+/- 27.2017	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

700 839
700 845

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Certificate #3122.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

5 VLVSTD 4

Catalog No. : 567675 **Lot No.:** A093730

Description : 8270 List 1 / Std #4 Indene

8270 List 1 / Std #4 Indene 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : August 2014 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Indene	2,000.0 µg/mL	+/- 11.6282 µg/mL	Gravimetric
	CAS # 95-13-6		+/- 24.1076 µg/mL	Unstressed
	Purity 99%		+/- 27.2017 µg/mL	Stressed
Solvent:	Methylene Chloride			
	CAS # 75-09-2			
	Purity 99%			

was 1000

Column:
30m x .25mm x .25um
Rtx-5 (cat.#10223)

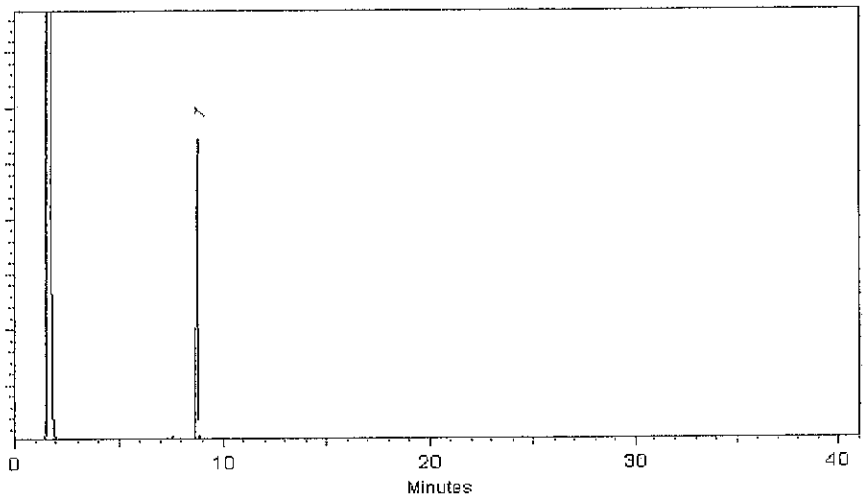
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



Jodi E. Breon - QA Analyst

Date Passed: 27-Feb-2013 Balance: 1128342313

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

CT#5

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5VLV STD5 SEC

Catalog No. : 567676.sec **Lot No.:** A093671

Description : 8270 List 1 / Std #5 N-Nitrosodiphenylamine

8270 List 1 / Std #5 N-Nitrosodiphenylamine 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : February 2015 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	N-Nitrosodiphenylamine	1,999.9	µg/mL	+/- 11.6278	µg/mL	Gravimetric
	CAS # 86-30-6.SEC			+/- 17.5908	µg/mL	Unstressed
	Purity 95%			+/- 34.7762	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

SVLV5706 5686

Catalog No. : 567677.sec **Lot No.:** A093656

Description : 8270 List 1 / Std #6 Benzaldehyde

8270 List 1 / Std #6 Benzaldehyde 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : August 2014 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Benzaldehyde	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 100-52-7.SEC		+/- 53.7239	µg/mL	Unstressed
	Purity 99%		+/- 66.9795	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Column:
30m x .25mm x .25um
Rtx-5 (cat.#10223)

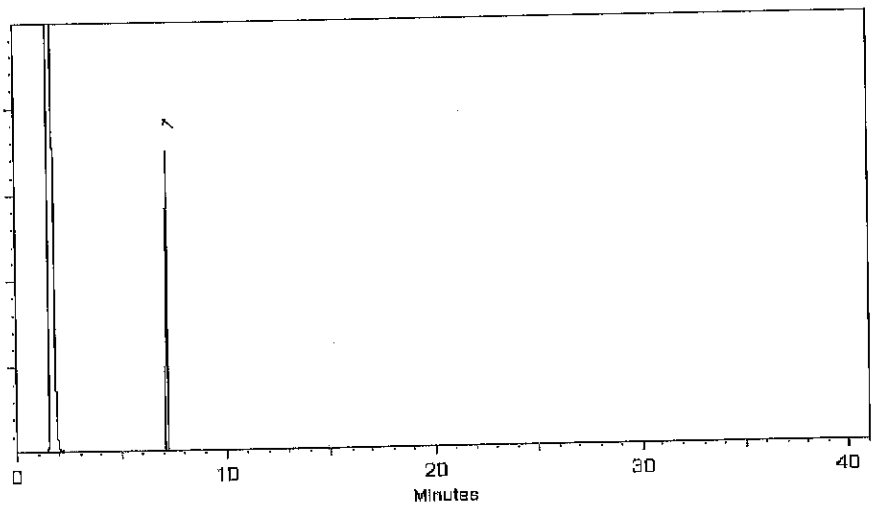
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



Jennifer L. Pollino - QC Analyst

Date Passed: 25-Feb-2013 **Balance:** 1128353505

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

SVLV5706 5686

Catalog No. : 567677.sec **Lot No.:** A093656

Description : 8270 List 1 / Std #6 Benzaldehyde

8270 List 1 / Std #6 Benzaldehyde 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : August 2014 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Benzaldehyde	2,000.0 µg/mL	+/- 11.6282	µg/mL	Gravimetric
	CAS # 100-52-7.SEC		+/- 53.7239	µg/mL	Unstressed
	Purity 99%		+/- 66.9795	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Column:
30m x .25mm x .25um
Rtx-5 (cat.#10223)

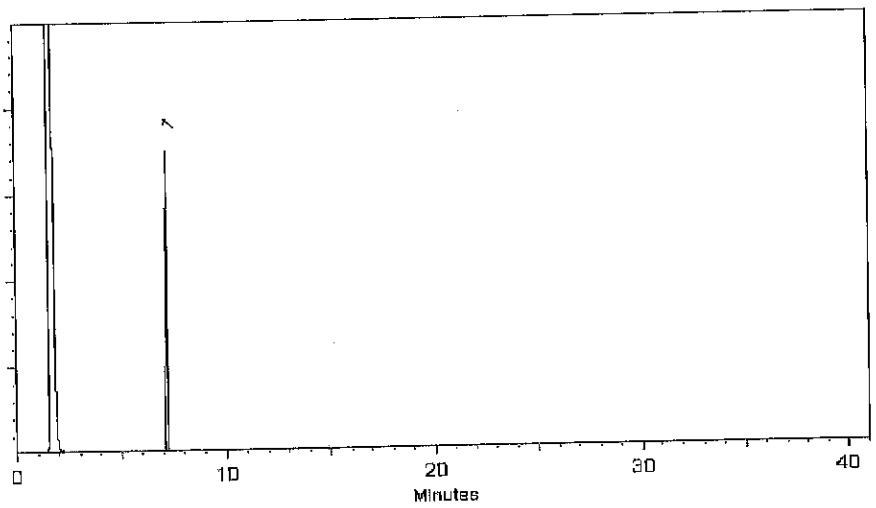
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



Jennifer L. Pollino - QC Analyst

Date Passed: 25-Feb-2013 **Balance:** 1128353505

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

700887
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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

SVLVSTDS

Catalog No. : 567676 **Lot No.:** A093442

Description : 8270 List 1 / Std #5 N-Nitrosodiphenylamine

8270 List 1 / Std #5 N-Nitrosodiphenylamine 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : February 2015 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)		
1	N-Nitrosodiphenylamine CAS # 86-30-6 Purity 97%	2,000.0 µg/mL	+/- 11.6282 +/- 17.5914 +/- 34.7774	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
Solvent:	Methylene Chloride CAS # 75-09-2 Purity 99%				

WAS 1,000

Column:
30m x .25mm x .25um
Rtx-5 (cat.#10223)

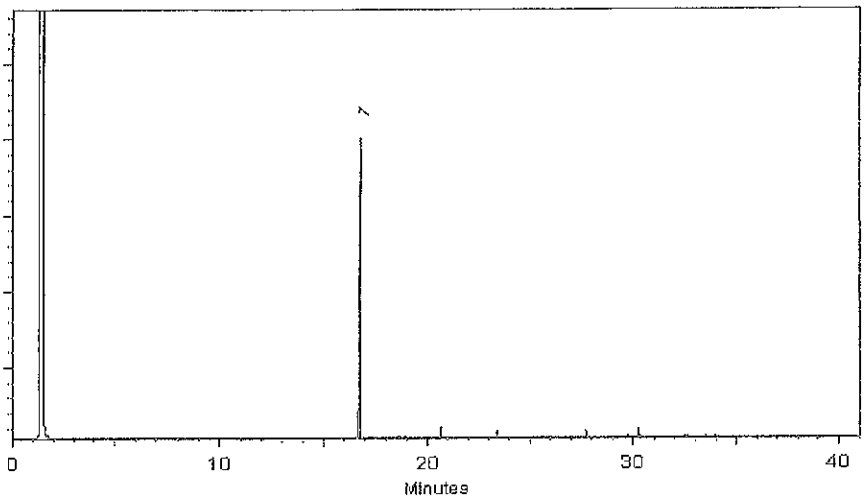
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



Jennifer L. Pollino - QC Analyst

Date Passed: 25-Feb-2013 **Balance:** 1128342313

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

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Certificate #3222.03

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

5 VLVSURR SPK

Catalog No. : 567685 **Lot No.:** A093638

Description : 8270 Surrogate Standard

8270 Surrogate Standard 5,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : February 2018 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L., K=2)		
1	2-Fluorophenol	5,000.0	µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 367-12-4			+/- 132.9492	µg/mL	Unstressed
	Purity 99%			+/- 163.4029	µg/mL	Stressed
2	Phenol-d5	5,000.0	µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 4165-62-2			+/- 132.9492	µg/mL	Unstressed
	Purity 99%			+/- 163.4029	µg/mL	Stressed
3	Nitrobenzene-d5	5,000.0	µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 4165-60-0			+/- 132.9492	µg/mL	Unstressed
	Purity 99%			+/- 163.4029	µg/mL	Stressed
4	2-Fluorobiphenyl	5,000.0	µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 321-60-8			+/- 132.9492	µg/mL	Unstressed
	Purity 99%			+/- 163.4029	µg/mL	Stressed
5	2,4,6-Tribromophenol	5,000.0	µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 118-79-6			+/- 132.9492	µg/mL	Unstressed
	Purity 99%			+/- 163.4029	µg/mL	Stressed
6	p-Terphenyl-d14	5,000.0	µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 1718-51-0			+/- 132.9492	µg/mL	Unstressed
	Purity 99%			+/- 163.4029	µg/mL	Stressed
Solvent:	Methylene Chloride					
	CAS # 75-09-2					
	Purity 99%					

Tech Tips:
Due to the limited solubility of p-terphenyl-d14 in methanol, we do not recommend that this mixture be diluted in methanol.

Column:
30m x .25mm x .25um
Rtx-5 (cat.#10223)

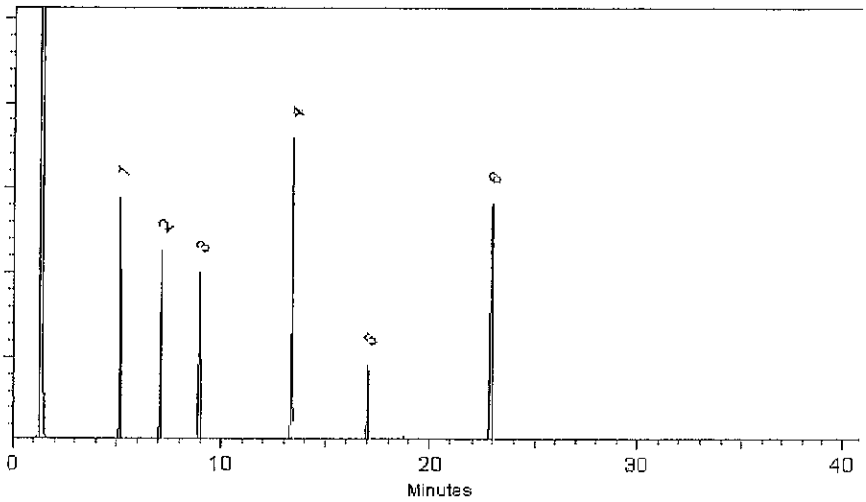
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



Diane Shaffer - QA Analyst

Date Passed: 22-Feb-2013 **Balance:** 1128342313

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

Absolute Standards, Inc.
800-368-1131
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ISO 17025 Accredited

10/25/2010

CERTIFIED WEIGHT REPORT

Lot #

Part Number: 70451 **Solvent(s):** H16S03 Methylene chloride
Lot Number: 120909
Description: N-Nitrosopyrrolidine

Expiration Date: 120914
Storage: 4 °C
Nominal Concentration (µg/mL): 1000

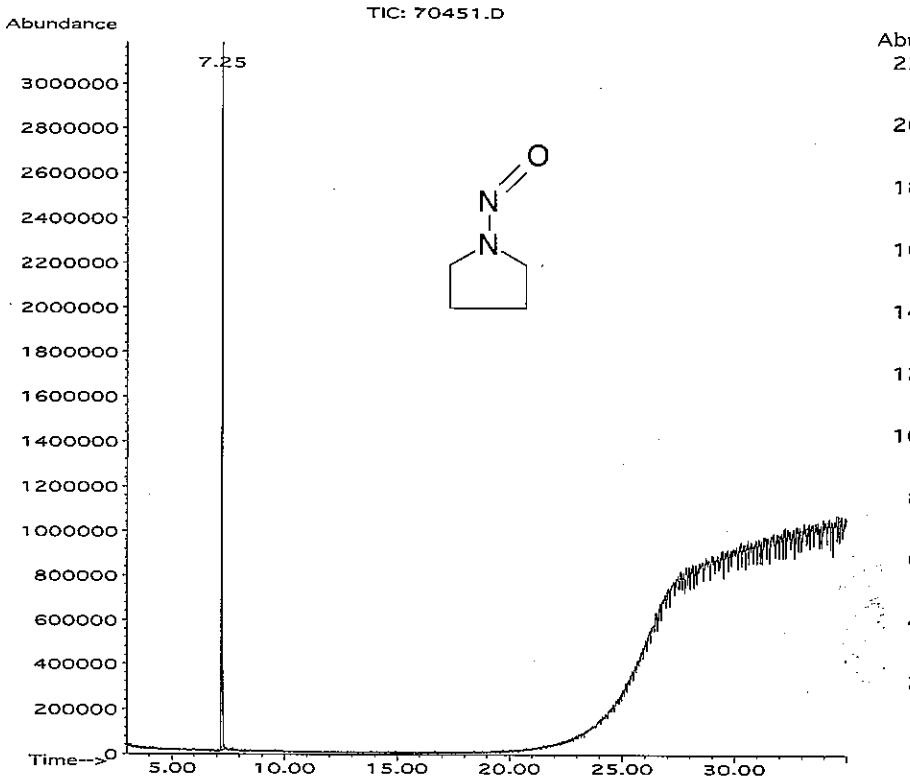
5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to: 50.0 0.006 Flask Uncertainty

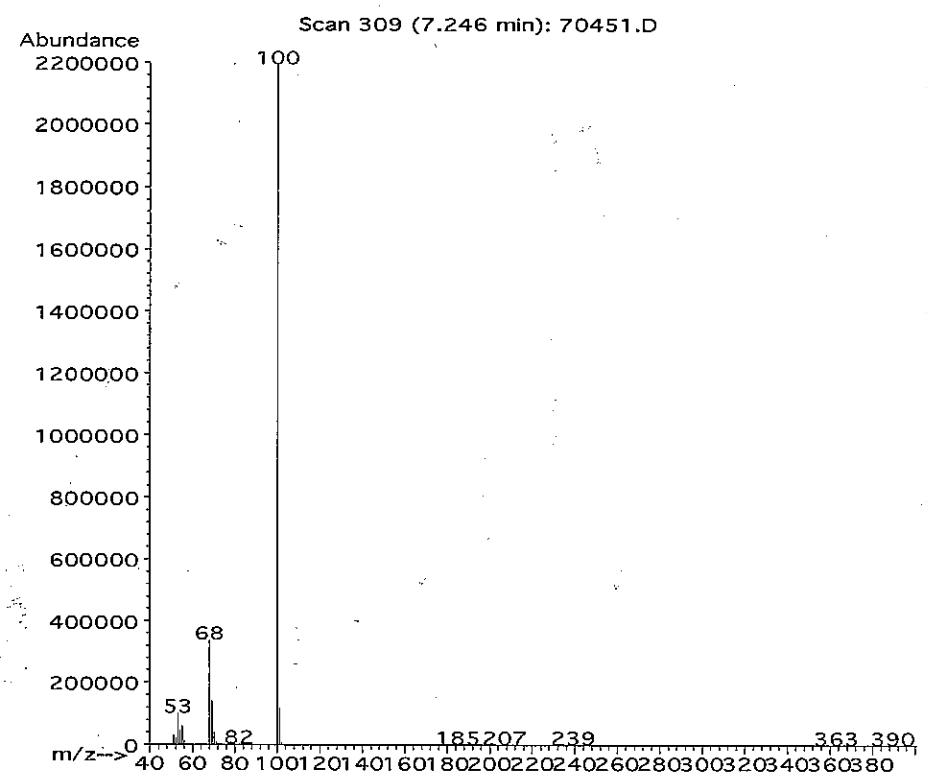
		120909
Formulated By:	Justin Dippold	DATE
		120909
Reviewed By:	Pedro L. Rentas	DATE

MSDS Information
(Solvent Safety Info. On Attached pg.)

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity	Uncertainty Purity	Target Weight (g)	Actual Weight (g)	Actual Conc(µg/mL)	Expanded Uncertainty	CAS#	OSHA PEL (TWA)	LD50
1. N-Nitrosopyrrolidine	451	04025BM	1000	99	0.2	0.05054	0.05069	1003.0	0.00450	00930-55-2	N/A	orl-rat 900mg/kg

Method GC8MSD-3.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Gina McLane.





Page 188 of 774

Certification Summary

Client: ENVIRON International Corp.
Project/Site: Metal Bank Site

TestAmerica Job ID: 180-26012-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Pittsburgh	Arkansas DEQ	State Program	6	88-0690
TestAmerica Pittsburgh	California	NELAP	9	4224CA
TestAmerica Pittsburgh	Connecticut	State Program	1	PH-0688
TestAmerica Pittsburgh	Florida	NELAP	4	E871008
TestAmerica Pittsburgh	Illinois	NELAP	5	002602
TestAmerica Pittsburgh	Kansas	NELAP	7	E-10350
TestAmerica Pittsburgh	L-A-B	DoD ELAP		L2314
TestAmerica Pittsburgh	Louisiana	NELAP	6	04041
TestAmerica Pittsburgh	New Hampshire	NELAP	1	203011
TestAmerica Pittsburgh	New Jersey	NELAP	2	PA005
TestAmerica Pittsburgh	New York	NELAP	2	11182
TestAmerica Pittsburgh	North Carolina DENR	State Program	4	434
TestAmerica Pittsburgh	Pennsylvania	NELAP	3	02-00416
TestAmerica Pittsburgh	South Carolina	State Program	4	89014
TestAmerica Pittsburgh	US Fish & Wildlife	Federal		LE94312A-1
TestAmerica Pittsburgh	USDA	Federal		P330-10-00139
TestAmerica Pittsburgh	USDA	Federal		P-Soil-01
TestAmerica Pittsburgh	Utah	NELAP	8	STLP
TestAmerica Pittsburgh	Virginia	NELAP	3	460189
TestAmerica Pittsburgh	West Virginia DEP	State Program	3	142
TestAmerica Pittsburgh	Wisconsin	State Program	5	998027800

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method 8270D

Semivolatile Organic Compounds (GC/MS) by Method 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Rxi-5SilMS ID: 0.32 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
MB-MW-02-20131009	180-26012-1	52	52	57	51	70	36
MB-MW-01-20131009	180-26012-2	42	38	52	56	67	37
MB-MW-03-20131009	180-26012-3	46	43	55	57	63	36
MB-EB-20131009	180-26012-4	49	47	55	57	61	65
MB-MW-04-20131009	180-26012-5	46	43	54	59	71	36
MB-MW-06-20131010	180-26012-6	39	34	48	52	63	29
DUP-20131009	180-26012-7	46	43	56	58	68	31
MB-MW-05-20131010	180-26012-8	44	44	51	54	74	27
MB-EB-20131010	180-26012-9	52	52	59	59	68	75
	MB 180-86837/1-A	67	66	69	69	70	87
	MB 180-86943/1-A	61	60	59	63	69	81
	LCS 180-86837/2-A	63	62	60	66	73	84
	LCS 180-86943/2-A	62	59	58	61	70	78
	LCSD 180-86943/3-A	65	63	60	64	76	79
MB-MW-02-20131009 MS	180-26012-1 MS	49	48	53	47	64	30
MB-MW-02-20131009 MSD	180-26012-1 MSD	48	47	55	48	64	30

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	26-100
PHL = Phenol-d5 (Surr)	30-102
NBZ = Nitrobenzene-d5 (Surr)	37-104
FBP = 2-Fluorobiphenyl	35-108
TBP = 2,4,6-Tribromophenol (Surr)	33-122
TPH = Terphenyl-d14 (Surr)	25-130

Column to be used to flag recovery values

FORM II 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N1017006.D

Lab ID: LCS 180-86837/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acenaphthene	200	138	69	39-106	
Acenaphthylene	200	136	68	40-113	
Anthracene	200	137	69	37-108	
Benzo[a]anthracene	200	136	68	40-103	
Benzo[a]pyrene	200	136	68	37-105	
Benzo[b]fluoranthene	200	130	65	35-100	
Benzo[g,h,i]perylene	200	150	75	31-118	
Benzo[k]fluoranthene	200	135	67	37-108	
Bis(2-ethylhexyl) phthalate	200	152	76	35-112	
2,2'-oxybis[1-chloropropane]	200	101	51	30-100	
4-Bromophenyl phenyl ether	200	144	72	38-108	
Butyl benzyl phthalate	200	150	75	34-110	
Carbazole	200	131	66	35-113	
4-Chloroaniline	200	118	59	26-99	
2-Chloronaphthalene	200	125	62	37-102	
4-Chlorophenyl phenyl ether	200	140	70	39-107	
Chrysene	200	145	73	39-103	
Dibenz(a,h)anthracene	200	150	75	32-117	
Dibenzofuran	200	136	68	37-107	
Di-n-butyl phthalate	200	145	72	36-113	
3,3'-Dichlorobenzidine	200	150	75	11-106	
Diethyl phthalate	200	145	72	39-112	
Dimethyl phthalate	200	140	70	40-110	
2,4-Dinitrotoluene	200	142	71	41-117	
2,6-Dinitrotoluene	200	145	73	42-118	
Di-n-octyl phthalate	200	139	70	27-118	
Fluoranthene	200	142	71	35-111	
Fluorene	200	138	69	39-107	
Hexachlorobenzene	200	143	71	35-106	
Hexachlorobutadiene	200	133	66	30-103	
Hexachlorocyclopentadiene	200	139	70	19-116	
Hexachloroethane	200	121	60	27-94	
Indeno[1,2,3-cd]pyrene	200	142	71	32-116	
Isophorone	200	132	66	39-108	
2-Methylnaphthalene	200	127	63	36-101	
Naphthalene	200	125	63	35-98	
2-Nitroaniline	200	142	71	37-114	
3-Nitroaniline	200	136	68	32-117	
4-Nitroaniline	200	135	67	32-117	
4-Nitrophenol	400	299	75	29-120	
Nitrobenzene	200	123	61	37-103	
N-Nitrosodi-n-propylamine	200	126	63	37-106	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N1017006.D

Lab ID: LCS 180-86837/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
N-Nitrosodiphenylamine	200	140	70	34-108	
Phenanthrene	200	135	67	34-107	
Pyrene	200	141	70	36-115	
4-Chloro-3-methylphenol	200	134	67	40-107	
2-Chlorophenol	200	127	64	34-100	
2-Methylphenol	200	128	64	34-101	
Methylphenol, 3 & 4	200	128	64	34-104	
2,4-Dichlorophenol	200	133	66	34-106	
2,4-Dimethylphenol	200	140	70	34-98	
2,4-Dinitrophenol	400	266	66	3-125	
4,6-Dinitro-2-methylphenol	400	290	72	24-121	
2-Nitrophenol	200	134	67	33-108	
Pentachlorophenol	400	271	68	10-118	
Phenol	200	120	60	35-98	
2,4,5-Trichlorophenol	200	140	70	31-111	
2,4,6-Trichlorophenol	200	143	71	34-110	
Acetophenone	200	113	57	30-150	
Atrazine	200	126	63	30-150	
Benzaldehyde	200	183	92	30-150	
1,1'-Biphenyl	200	132	66	10-140	
Caprolactam	200	138	69	10-140	
Bis(2-chloroethoxy)methane	200	120	60	36-101	
Bis(2-chloroethyl)ether	200	120	60	34-96	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N1018003.D

Lab ID: LCS 180-86943/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acenaphthene	200	127	64	39-106	
Acenaphthylene	200	125	62	40-113	
Anthracene	200	123	62	37-108	
Benzo[a]anthracene	200	128	64	40-103	
Benzo[a]pyrene	200	123	61	37-105	
Benzo[b]fluoranthene	200	123	61	35-100	
Benzo[g,h,i]perylene	200	133	67	31-118	
Benzo[k]fluoranthene	200	118	59	37-108	
Bis(2-ethylhexyl) phthalate	200	141	70	35-112	
2,2'-oxybis[1-chloropropane]	200	95.2	48	30-100	
4-Bromophenyl phenyl ether	200	130	65	38-108	
Butyl benzyl phthalate	200	142	71	34-110	
Carbazole	200	122	61	35-113	
4-Chloroaniline	200	111	56	26-99	
2-Chloronaphthalene	200	110	55	37-102	
4-Chlorophenyl phenyl ether	200	131	65	39-107	
Chrysene	200	135	68	39-103	
Dibenz(a,h)anthracene	200	135	67	32-117	
Dibenzofuran	200	127	63	37-107	
Di-n-butyl phthalate	200	129	64	36-113	
3,3'-Dichlorobenzidine	200	126	63	11-106	
Diethyl phthalate	200	131	65	39-112	
Dimethyl phthalate	200	127	64	40-110	
2,4-Dinitrotoluene	200	131	66	41-117	
2,6-Dinitrotoluene	200	129	65	42-118	
Di-n-octyl phthalate	200	132	66	27-118	
Fluoranthene	200	130	65	35-111	
Fluorene	200	128	64	39-107	
Hexachlorobenzene	200	132	66	35-106	
Hexachlorobutadiene	200	124	62	30-103	
Hexachlorocyclopentadiene	200	130	65	19-116	
Hexachloroethane	200	118	59	27-94	
Indeno[1,2,3-cd]pyrene	200	127	64	32-116	
Isophorone	200	122	61	39-108	
2-Methylnaphthalene	200	119	59	36-101	
Naphthalene	200	118	59	35-98	
2-Nitroaniline	200	126	63	37-114	
3-Nitroaniline	200	124	62	32-117	
4-Nitroaniline	200	124	62	32-117	
4-Nitrophenol	400	266	67	29-120	
Nitrobenzene	200	112	56	37-103	
N-Nitrosodi-n-propylamine	200	117	59	37-106	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N1018003.D

Lab ID: LCS 180-86943/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
N-Nitrosodiphenylamine	200	127	64	34-108	
Phenanthrene	200	128	64	34-107	
Pyrene	200	131	65	36-115	
4-Chloro-3-methylphenol	200	125	62	40-107	
2-Chlorophenol	200	122	61	34-100	
2-Methylphenol	200	123	61	34-101	
Methylphenol, 3 & 4	200	121	60	34-104	
2,4-Dichlorophenol	200	126	63	34-106	
2,4-Dimethylphenol	200	130	65	34-98	
2,4-Dinitrophenol	400	240	60	3-125	
4,6-Dinitro-2-methylphenol	400	244	61	24-121	
2-Nitrophenol	200	127	64	33-108	
Pentachlorophenol	400	222	55	10-118	
Phenol	200	119	59	35-98	
2,4,5-Trichlorophenol	200	129	64	31-111	
2,4,6-Trichlorophenol	200	135	68	34-110	
Acetophenone	200	113	57	30-150	
Atrazine	200	128	64	30-150	
Benzaldehyde	200	110	55	30-150	
1,1'-Biphenyl	200	123	61	10-140	
Caprolactam	200	133	67	10-140	
Bis(2-chloroethoxy)methane	200	112	56	36-101	
Bis(2-chloroethyl)ether	200	116	58	34-96	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N1018004.D

Lab ID: LCSD 180-86943/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acenaphthene	200	133	66	4	32	39-106	
Acenaphthylene	200	133	66	6	33	40-113	
Anthracene	200	133	67	8	40	37-108	
Benzo[a]anthracene	200	135	68	6	33	40-103	
Benzo[a]pyrene	200	127	63	3	35	37-105	
Benzo[b]fluoranthene	200	122	61	0	44	35-100	
Benzo[g,h,i]perylene	200	137	68	2	45	31-118	
Benzo[k]fluoranthene	200	122	61	4	42	37-108	
Bis(2-ethylhexyl) phthalate	200	150	75	6	34	35-112	
2,2'-oxybis[1-chloropropane]	200	99.4	50	4	38	30-100	
4-Bromophenyl phenyl ether	200	143	71	9	40	38-108	
Butyl benzyl phthalate	200	150	75	6	35	34-110	
Carbazole	200	130	65	6	32	35-113	
4-Chloroaniline	200	116	58	5	55	26-99	
2-Chloronaphthalene	200	119	60	8	34	37-102	
4-Chlorophenyl phenyl ether	200	138	69	6	34	39-107	
Chrysene	200	140	70	4	38	39-103	
Dibenz(a,h)anthracene	200	139	69	3	43	32-117	
Dibenzofuran	200	133	67	5	32	37-107	
Di-n-butyl phthalate	200	138	69	7	39	36-113	
3,3'-Dichlorobenzidine	200	131	65	4	56	11-106	
Diethyl phthalate	200	138	69	5	32	39-112	
Dimethyl phthalate	200	137	69	7	33	40-110	
2,4-Dinitrotoluene	200	138	69	5	32	41-117	
2,6-Dinitrotoluene	200	139	70	7	33	42-118	
Di-n-octyl phthalate	200	136	68	3	36	27-118	
Fluoranthene	200	139	69	6	43	35-111	
Fluorene	200	135	67	5	33	39-107	
Hexachlorobenzene	200	142	71	8	36	35-106	
Hexachlorobutadiene	200	131	65	5	41	30-103	
Hexachlorocyclopentadiene	200	137	69	6	57	19-116	
Hexachloroethane	200	124	62	5	43	27-94	
Indeno[1,2,3-cd]pyrene	200	132	66	3	45	32-116	
Isophorone	200	131	65	7	36	39-108	
2-Methylnaphthalene	200	125	62	5	35	36-101	
Naphthalene	200	123	62	5	39	35-98	
2-Nitroaniline	200	131	66	4	33	37-114	
3-Nitroaniline	200	129	65	4	46	32-117	
4-Nitroaniline	200	125	62	0	39	32-117	
4-Nitrophenol	400	280	70	5	39	29-120	
Nitrobenzene	200	116	58	4	34	37-103	
N-Nitrosodi-n-propylamine	200	126	63	7	36	37-106	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N1018004.D

Lab ID: LCSD 180-86943/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
N-Nitrosodiphenylamine	200	136	68	6	42	34-108	
Phenanthrene	200	136	68	6	34	34-107	
Pyrene	200	135	67	3	38	36-115	
4-Chloro-3-methylphenol	200	133	67	6	32	40-107	
2-Chlorophenol	200	128	64	5	31	34-100	
2-Methylphenol	200	131	65	6	34	34-101	
Methylphenol, 3 & 4	200	128	64	6	34	34-104	
2,4-Dichlorophenol	200	133	66	5	33	34-106	
2,4-Dimethylphenol	200	137	69	5	34	34-98	
2,4-Dinitrophenol	400	254	63	6	62	3-125	
4,6-Dinitro-2-methylphenol	400	266	66	9	50	24-121	
2-Nitrophenol	200	131	66	3	41	33-108	
Pentachlorophenol	400	232	58	4	49	10-118	
Phenol	200	124	62	4	35	35-98	
2,4,5-Trichlorophenol	200	132	66	2	32	31-111	
2,4,6-Trichlorophenol	200	141	71	4	35	34-110	
Acetophenone	200	118	59	4	30	30-150	
Atrazine	200	134	67	4	30	30-150	
Benzaldehyde	200	114	57	3	30	30-150	
1,1'-Biphenyl	200	130	65	6	30	10-140	
Caprolactam	200	141	70	6	30	10-140	
Bis(2-chloroethoxy)methane	200	118	59	6	35	36-101	
Bis(2-chloroethyl)ether	200	123	62	7	34	34-96	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N1017008.D

Lab ID: 180-26012-1 MS Client ID: MB-MW-02-20131009 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Acenaphthene	194	ND	114	59	39-106	
Acenaphthylene	194	ND	111	57	40-113	
Anthracene	194	ND	113	58	37-108	
Benzo[a]anthracene	194	ND	115	59	40-103	
Benzo[a]pyrene	194	ND	83.0	43	37-105	
Benzo[b]fluoranthene	194	ND	80.0	41	35-100	
Benzo[g,h,i]perylene	194	ND	106	55	31-118	
Benzo[k]fluoranthene	194	ND	76.9	40	37-108	
Bis(2-ethylhexyl) phthalate	194	ND	124	64	35-112	
2,2'-oxybis[1-chloropropane]	194	ND	80.8	42	30-100	
4-Bromophenyl phenyl ether	194	ND	112	58	38-108	
Butyl benzyl phthalate	194	ND	112	58	34-110	
Carbazole	194	ND	134	69	35-113	
4-Chloroaniline	194	ND	82.7	43	26-99	
2-Chloronaphthalene	194	ND	99.6	51	37-102	
4-Chlorophenyl phenyl ether	194	ND	119	61	39-107	
Chrysene	194	ND	130	67	39-103	
Dibenz(a,h)anthracene	194	ND	108	56	32-117	
Dibenzofuran	194	ND	114	58	37-107	
Di-n-butyl phthalate	194	ND	119	61	36-113	
3,3'-Dichlorobenzidine	194	ND	8.82 J	5	11-106	F
Diethyl phthalate	194	97	131	18	39-112	F
Dimethyl phthalate	194	ND	125	64	40-110	
2,4-Dinitrotoluene	194	ND	137	70	41-117	
2,6-Dinitrotoluene	194	ND	130	67	42-118	
Di-n-octyl phthalate	194	ND	81.9	42	27-118	
Fluoranthene	194	ND	125	64	35-111	
Fluorene	194	ND	116	60	39-107	
Hexachlorobenzene	194	ND	117	61	35-106	
Hexachlorobutadiene	194	ND	101	52	30-103	
Hexachlorocyclopentadiene	194	ND	71.8	37	19-116	
Hexachloroethane	194	ND	90.6	47	27-94	
Indeno[1,2,3-cd]pyrene	194	ND	102	52	32-116	
Isophorone	194	ND	114	59	39-108	
2-Methylnaphthalene	194	ND	106	55	36-101	
Naphthalene	194	1.2 J	104	53	35-98	
2-Nitroaniline	194	ND	125	65	37-114	
3-Nitroaniline	194	ND	111	57	32-117	
4-Nitroaniline	194	ND	126	65	32-117	
4-Nitrophenol	388	ND	296	76	29-120	
Nitrobenzene	194	ND	105	54	37-103	
N-Nitrosodi-n-propylamine	194	ND	105	54	37-106	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N1017008.D

Lab ID: 180-26012-1 MS Client ID: MB-MW-02-20131009 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
N-Nitrosodiphenylamine	194	ND	121	62	34-108	
Phenanthrene	194	ND	112	58	34-107	
Pyrene	194	ND	97.0	50	36-115	
4-Chloro-3-methylphenol	194	ND	120	62	40-107	
2-Chlorophenol	194	ND	104	53	34-100	
2-Methylphenol	194	ND	103	53	34-101	
Methylphenol, 3 & 4	194	ND	107	55	34-104	
2,4-Dichlorophenol	194	ND	112	58	34-106	
2,4-Dimethylphenol	194	150	254	53	34-98	
2,4-Dinitrophenol	388	ND	274	70	3-125	
4,6-Dinitro-2-methylphenol	388	ND	282	73	24-121	
2-Nitrophenol	194	ND	113	58	33-108	
Pentachlorophenol	388	ND	303	78	10-118	
Phenol	194	ND	90.1	46	35-98	
2,4,5-Trichlorophenol	194	ND	122	63	31-111	
2,4,6-Trichlorophenol	194	ND	121	62	34-110	
Acetophenone	194	ND	99.6	51	30-150	
Atrazine	194	ND	77.3	40	30-150	
Benzaldehyde	194	ND	99.9	51	30-150	
1,1'-Biphenyl	194	ND	108	55	10-140	
Caprolactam	194	42 J	142	52	10-140	
Bis(2-chloroethoxy)methane	194	ND	102	52	36-101	
Bis(2-chloroethyl)ether	194	ND	101	52	34-96	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N1017009.D

Lab ID: 180-26012-1 MSD Client ID: MB-MW-02-20131009 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acenaphthene	190	114	60	0	32	39-106	
Acenaphthylene	190	109	57	1	33	40-113	
Anthracene	190	109	57	3	40	37-108	
Benzo[a]anthracene	190	114	60	1	33	40-103	
Benzo[a]pyrene	190	81.4	43	2	35	37-105	
Benzo[b]fluoranthene	190	77.3	41	4	44	35-100	
Benzo[g,h,i]perylene	190	105	55	1	45	31-118	
Benzo[k]fluoranthene	190	75.9	40	1	42	37-108	
Bis(2-ethylhexyl) phthalate	190	122	64	2	34	35-112	
2,2'-oxybis[1-chloropropane]	190	81.3	43	1	38	30-100	
4-Bromophenyl phenyl ether	190	112	59	1	40	38-108	
Butyl benzyl phthalate	190	112	59	0	35	34-110	
Carbazole	190	131	69	3	32	35-113	
4-Chloroaniline	190	78.7	41	5	55	26-99	
2-Chloronaphthalene	190	99.1	52	0	34	37-102	
4-Chlorophenyl phenyl ether	190	113	60	5	34	39-107	
Chrysene	190	127	67	3	38	39-103	
Dibenz(a,h)anthracene	190	106	56	2	43	32-117	
Dibenzofuran	190	114	60	1	32	37-107	
Di-n-butyl phthalate	190	124	65	4	39	36-113	
3,3'-Dichlorobenzidine	190	8.17 J	4	8	56	11-106	F
Diethyl phthalate	190	126	16	3	32	39-112	F
Dimethyl phthalate	190	122	64	2	33	40-110	
2,4-Dinitrotoluene	190	134	70	2	32	41-117	
2,6-Dinitrotoluene	190	129	68	1	33	42-118	
Di-n-octyl phthalate	190	80.5	42	2	36	27-118	
Fluoranthene	190	123	65	1	43	35-111	
Fluorene	190	117	61	0	33	39-107	
Hexachlorobenzene	190	117	62	0	36	35-106	
Hexachlorobutadiene	190	98.1	51	3	41	30-103	
Hexachlorocyclopentadiene	190	73.6	39	2	57	19-116	
Hexachloroethane	190	89.0	47	2	43	27-94	
Indeno[1,2,3-cd]pyrene	190	99.7	52	2	45	32-116	
Isophorone	190	111	58	3	36	39-108	
2-Methylnaphthalene	190	105	55	1	35	36-101	
Naphthalene	190	105	54	1	39	35-98	
2-Nitroaniline	190	124	65	1	33	37-114	
3-Nitroaniline	190	76.1	40	37	46	32-117	
4-Nitroaniline	190	115	60	9	39	32-117	
4-Nitrophenol	381	268	70	10	39	29-120	
Nitrobenzene	190	107	56	2	34	37-103	
N-Nitrosodi-n-propylamine	190	101	53	4	36	37-106	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N1017009.D

Lab ID: 180-26012-1 MSD Client ID: MB-MW-02-20131009 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
N-Nitrosodiphenylamine	190	120	63	1	42	34-108	
Phenanthrene	190	110	58	2	34	34-107	
Pyrene	190	101	53	4	38	36-115	
4-Chloro-3-methylphenol	190	120	63	0	32	40-107	
2-Chlorophenol	190	99.3	52	4	31	34-100	
2-Methylphenol	190	103	54	0	34	34-101	
Methylphenol, 3 & 4	190	99.6	52	8	34	34-104	
2,4-Dichlorophenol	190	111	58	1	33	34-106	
2,4-Dimethylphenol	190	257	55	1	34	34-98	
2,4-Dinitrophenol	381	260	68	5	62	3-125	
4,6-Dinitro-2-methylphenol	381	277	73	2	50	24-121	
2-Nitrophenol	190	114	60	1	41	33-108	
Pentachlorophenol	381	286	75	6	49	10-118	
Phenol	190	86.3	45	4	35	35-98	
2,4,5-Trichlorophenol	190	121	64	1	32	31-111	
2,4,6-Trichlorophenol	190	119	63	1	35	34-110	
Acetophenone	190	94.3	49	6	30	30-150	
Atrazine	190	77.3	41	0	30	30-150	
Benzaldehyde	190	98.7	52	1	30	30-150	
1,1'-Biphenyl	190	108	57	0	30	10-140	
Caprolactam	190	138	50	3	30	10-140	
Bis(2-chloroethoxy)methane	190	103	54	1	35	36-101	
Bis(2-chloroethyl)ether	190	97.5	51	3	34	34-96	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab File ID: N1017005.D Lab Sample ID: MB 180-86837/1-A

Matrix: Water Date Extracted: 10/16/2013 09:07

Instrument ID: 733 Date Analyzed: 10/17/2013 12:03

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-86837/2-A	N1017006.D	10/17/2013 13:20
MB-MW-02-20131009	180-26012-1	N1017007.D	10/17/2013 14:12
MB-MW-02-20131009 MS	180-26012-1 MS	N1017008.D	10/17/2013 15:04
MB-MW-02-20131009 MSD	180-26012-1 MSD	N1017009.D	10/17/2013 15:31
MB-MW-01-20131009	180-26012-2	N1017010.D	10/17/2013 15:57
MB-MW-03-20131009	180-26012-3	N1017011.D	10/17/2013 16:23
MB-EB-20131009	180-26012-4	N1017012.D	10/17/2013 16:49
MB-MW-04-20131009	180-26012-5	N1017013.D	10/17/2013 17:15
DUP-20131009	180-26012-7	N1017014.D	10/17/2013 17:41

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab File ID: N1018002.D Lab Sample ID: MB 180-86943/1-A

Matrix: Water Date Extracted: 10/17/2013 06:31

Instrument ID: 733 Date Analyzed: 10/18/2013 11:57

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-86943/2-A	N1018003.D	10/18/2013 12:48
	LCSD 180-86943/3-A	N1018004.D	10/18/2013 13:14
MB-MW-06-20131010	180-26012-6	N1018005.D	10/18/2013 14:32
MB-MW-05-20131010	180-26012-8	N1018006.D	10/18/2013 14:58
MB-EB-20131010	180-26012-9	N1018007.D	10/18/2013 15:24

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab File ID: N1009DF1.D DFTPP Injection Date: 10/09/2013

Instrument ID: 733 DFTPP Injection Time: 05:09

Analysis Batch No.: 86218

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	36.1	
68	Less than 2.0 % of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	41.4	
70	Less than 2.0 % of mass 69	0.5	(1.1)1
127	40.0 - 60.0 % of mass 198	44.9	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	7.6	
275	10.0 - 30.0 % of mass 198	24.8	
365	Greater than 1.0 % of mass 198	2.8	
441	Present but less than mass 443	7.8	(68.6)3
442	Greater than 40.0 % of mass 198	57.0	
443	17.0 - 23.0 % of mass 442	11.3	(19.9)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 180-86218/2	N1009IC1.D	10/09/2013	05:24
	IC 180-86218/3	N1009IC2.D	10/09/2013	05:49
	IC 180-86218/4	N1009IC3.D	10/09/2013	06:15
	ICIS 180-86218/5	N1009IC4.D	10/09/2013	06:40
	IC 180-86218/6	N1009IC5.D	10/09/2013	07:06
	IC 180-86218/7	N1009IC6.D	10/09/2013	07:31
	IC 180-86218/8	N1009IC7.D	10/09/2013	07:56
	IC 180-86218/9	N1009IC8.D	10/09/2013	08:22
	ICV 180-86218/10	N1009SV1.D	10/09/2013	08:47
	ICV 180-86218/11	N1009SV2.D	10/09/2013	09:13

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab File ID: N1017DF1.D DFTPP Injection Date: 10/17/2013

Instrument ID: 733 DFTPP Injection Time: 10:57

Analysis Batch No.: 87081

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	34.9	
68	Less than 2.0 % of mass 69	0.7	(1.8)1
69	Mass 69 relative abundance	40.0	
70	Less than 2.0 % of mass 69	0.5	(1.1)1
127	40.0 - 60.0 % of mass 198	44.1	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	7.7	
275	10.0 - 30.0 % of mass 198	26.8	
365	Greater than 1.0 % of mass 198	3.3	
441	Present but less than mass 443	6.1	(51.6)3
442	Greater than 40.0 % of mass 198	60.5	
443	17.0 - 23.0 % of mass 442	11.8	(19.6)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-87081/25	N10170CC.D	10/17/2013	11:11
	MB 180-86837/1-A	N1017005.D	10/17/2013	12:03
	LCS 180-86837/2-A	N1017006.D	10/17/2013	13:20
MB-MW-02-20131009	180-26012-1	N1017007.D	10/17/2013	14:12
MB-MW-02-20131009 MS	180-26012-1 MS	N1017008.D	10/17/2013	15:04
MB-MW-02-20131009 MSD	180-26012-1 MSD	N1017009.D	10/17/2013	15:31
MB-MW-01-20131009	180-26012-2	N1017010.D	10/17/2013	15:57
MB-MW-03-20131009	180-26012-3	N1017011.D	10/17/2013	16:23
MB-EB-20131009	180-26012-4	N1017012.D	10/17/2013	16:49
MB-MW-04-20131009	180-26012-5	N1017013.D	10/17/2013	17:15
DUP-20131009	180-26012-7	N1017014.D	10/17/2013	17:41

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab File ID: N1018DF1.D DFTPP Injection Date: 10/18/2013

Instrument ID: 733 DFTPP Injection Time: 11:16

Analysis Batch No.: 87196

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	32.2	
68	Less than 2.0 % of mass 69	0.3	(0.7)1
69	Mass 69 relative abundance	39.0	
70	Less than 2.0 % of mass 69	0.3	(0.8)1
127	40.0 - 60.0 % of mass 198	45.7	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.8	
275	10.0 - 30.0 % of mass 198	24.8	
365	Greater than 1.0 % of mass 198	2.3	
441	Present but less than mass 443	10.4	(82.0)3
442	Greater than 40.0 % of mass 198	60.9	
443	17.0 - 23.0 % of mass 442	12.7	(20.8)2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-87196/8	N10180CC.D	10/18/2013	11:31
	MB 180-86943/1-A	N1018002.D	10/18/2013	11:57
	LCS 180-86943/2-A	N1018003.D	10/18/2013	12:48
	LCSD 180-86943/3-A	N1018004.D	10/18/2013	13:14
MB-MW-06-20131010	180-26012-6	N1018005.D	10/18/2013	14:32
MB-MW-05-20131010	180-26012-8	N1018006.D	10/18/2013	14:58
MB-EB-20131010	180-26012-9	N1018007.D	10/18/2013	15:24

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Sample No.: ICIS 180-86218/5 Date Analyzed: 10/09/2013 06:40

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): N1009IC4.D Heated Purge: (Y/N) N

Calibration ID: 11737

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		188114	6.25	668301	7.48	372720	9.14
UPPER LIMIT		376228	6.75	1336602	7.98	745440	9.64
LOWER LIMIT		94057	5.75	334151	6.98	186360	8.64
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 180-86218/10		164615	6.25	561006	7.48	314870	9.13
ICV 180-86218/11		182254	6.24	613109	7.46	345462	9.12

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Sample No.: ICIS 180-86218/5 Date Analyzed: 10/09/2013 06:40

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): N1009IC4.D Heated Purge: (Y/N) N

Calibration ID: 11737

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		628542	10.53	617714	14.13	478556	17.09
UPPER LIMIT		1257084	11.03	1235428	14.63	957112	17.59
LOWER LIMIT		314271	10.03	308857	13.63	239278	16.59
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 180-86218/10		509056	10.53	495383	14.13	377355	17.09
ICV 180-86218/11		542107	10.52	536512	14.11	434037	17.05

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Sample No.: CCVIS 180-87081/25 Date Analyzed: 10/17/2013 11:11

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): N10170CC.D Heated Purge: (Y/N) N

Calibration ID: 11737

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		173140	6.27	611193	7.51	342713	9.16
UPPER LIMIT		346280	6.77	1222386	8.01	685426	9.66
LOWER LIMIT		86570	5.77	305597	7.01	171357	8.66
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-86837/1-A		161981	6.29	570930	7.52	334864	9.16
LCS 180-86837/2-A		154806	6.29	532428	7.51	292267	9.16
180-26012-1	MB-MW-02-20131009	99679	6.28	327565	7.51	198447	9.16
180-26012-1 MS	MB-MW-02-20131009 MS	114719	6.27	385652	7.51	226083	9.15
180-26012-1 MSD	MB-MW-02-20131009 MSD	123161	6.27	404275	7.50	231245	9.15
180-26012-2	MB-MW-01-20131009	151911	6.28	500291	7.50	266450	9.15
180-26012-3	MB-MW-03-20131009	168055	6.29	585853	7.51	324663	9.16
180-26012-4	MB-EB-20131009	169486	6.27	610405	7.50	347050	9.15
180-26012-5	MB-MW-04-20131009	141774	6.28	447415	7.51	235937	9.16
180-26012-7	DUP-20131009	146745	6.28	461749	7.51	247124	9.16

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Sample No.: CCVIS 180-87081/25 Date Analyzed: 10/17/2013 11:11

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): N10170CC.D Heated Purge: (Y/N) N

Calibration ID: 11737

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		542033	10.54	525782	14.11	408674	17.06
UPPER LIMIT		1084066	11.04	1051564	14.61	817348	17.56
LOWER LIMIT		271017	10.04	262891	13.61	204337	16.56
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-86837/1-A		563932	10.54	504560	14.10	377143	17.04
LCS 180-86837/2-A		471209	10.54	459457	14.10	387551	17.04
180-26012-1	MB-MW-02-20131009	340744	10.55	471560	14.11	606500	17.06
180-26012-1 MS	MB-MW-02-20131009 MS	391216	10.53	505505	14.10	668380	17.04
180-26012-1 MSD	MB-MW-02-20131009 MSD	396605	10.54	501724	14.09	670988	17.04
180-26012-2	MB-MW-01-20131009	427432	10.53	444854	14.09	408619	17.02
180-26012-3	MB-MW-03-20131009	513956	10.54	481143	14.10	388023	17.04
180-26012-4	MB-EB-20131009	584615	10.53	529593	14.08	408311	17.01
180-26012-5	MB-MW-04-20131009	372490	10.54	406709	14.09	367737	17.04
180-26012-7	DUP-20131009	394237	10.54	406935	14.10	367637	17.03

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Sample No.: CCVIS 180-87196/8 Date Analyzed: 10/18/2013 11:31

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): N10180CC.D Heated Purge: (Y/N) N

Calibration ID: 11737

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		204457	6.28	712087	7.52	399548	9.18
UPPER LIMIT		408914	6.78	1424174	8.02	799096	9.68
LOWER LIMIT		102229	5.78	356044	7.02	199774	8.68
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-86943/1-A		176836	6.27	628155	7.50	375755	9.17
LCS 180-86943/2-A		168129	6.27	590019	7.52	336073	9.18
LCSD 180-86943/3-A		160783	6.27	573115	7.51	326938	9.17
180-26012-6	MB-MW-06-20131010	170375	6.28	579431	7.52	321668	9.18
180-26012-8	MB-MW-05-20131010	155883	6.27	509483	7.51	283259	9.17
180-26012-9	MB-EB-20131010	162354	6.27	584925	7.50	348428	9.16

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Sample No.: CCVIS 180-87196/8 Date Analyzed: 10/18/2013 11:31

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): N10180CC.D Heated Purge: (Y/N) N

Calibration ID: 11737

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		645528	10.57	614576	14.16	490762	17.12
UPPER LIMIT		1291056	11.07	1229152	14.66	981524	17.62
LOWER LIMIT		322764	10.07	307288	13.66	245381	16.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-86943/1-A		656775	10.55	635068	14.14	471081	17.10
LCS 180-86943/2-A		547088	10.57	532871	14.17	461156	17.12
LCSD 180-86943/3-A		520663	10.56	518974	14.15	456657	17.09
180-26012-6	MB-MW-06-20131010	511101	10.57	491105	14.16	413619	17.10
180-26012-8	MB-MW-05-20131010	425480	10.57	459367	14.15	424943	17.10
180-26012-9	MB-EB-20131010	586958	10.56	567591	14.14	443832	17.08

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-02-20131009 | Lab Sample ID: 180-26012-1

Matrix: Water | Lab File ID: N1017007.D

Analysis Method: 8270D | Date Collected: 10/09/2013 11:15

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1030(mL) | Date Analyzed: 10/17/2013 14:12

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND		1.9	0.14
208-96-8	Acenaphthylene	ND		1.9	0.15
120-12-7	Anthracene	ND		1.9	0.15
56-55-3	Benzo[a]anthracene	ND		1.9	0.14
50-32-8	Benzo[a]pyrene	ND		1.9	0.13
205-99-2	Benzo[b]fluoranthene	ND		1.9	0.15
191-24-2	Benzo[g,h,i]perylene	ND		1.9	0.15
207-08-9	Benzo[k]fluoranthene	ND		1.9	0.53
117-81-7	Bis(2-ethylhexyl) phthalate	ND		19	12
108-60-1	2,2'-oxybis[1-chloropropane]	ND		1.9	0.19
101-55-3	4-Bromophenyl phenyl ether	ND		9.7	0.62
85-68-7	Butyl benzyl phthalate	ND		9.7	1.4
86-74-8	Carbazole	ND		1.9	0.15
106-47-8	4-Chloroaniline	ND		9.7	0.86
91-58-7	2-Chloronaphthalene	ND		1.9	0.15
7005-72-3	4-Chlorophenyl phenyl ether	ND		9.7	0.49
218-01-9	Chrysene	ND		1.9	0.14
53-70-3	Dibenz(a,h)anthracene	ND		1.9	0.15
132-64-9	Dibenzofuran	ND		9.7	0.60
84-74-2	Di-n-butyl phthalate	ND		9.7	1.2
91-94-1	3,3'-Dichlorobenzidine	ND		9.7	1.1
84-66-2	Diethyl phthalate	97		9.7	1.4
131-11-3	Dimethyl phthalate	ND		9.7	0.74
121-14-2	2,4-Dinitrotoluene	ND		9.7	0.52
606-20-2	2,6-Dinitrotoluene	ND		9.7	0.77
117-84-0	Di-n-octyl phthalate	ND		9.7	2.0
206-44-0	Fluoranthene	ND		1.9	0.16
86-73-7	Fluorene	ND		1.9	0.21
118-74-1	Hexachlorobenzene	ND		1.9	0.18
87-68-3	Hexachlorobutadiene	ND		1.9	0.16
77-47-4	Hexachlorocyclopentadiene	ND		9.7	0.50
67-72-1	Hexachloroethane	ND		9.7	0.61
193-39-5	Indeno[1,2,3-cd]pyrene	ND		1.9	0.19
78-59-1	Isophorone	ND		9.7	0.63

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-02-20131009 | Lab Sample ID: 180-26012-1

Matrix: Water | Lab File ID: N1017007.D

Analysis Method: 8270D | Date Collected: 10/09/2013 11:15

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1030(mL) | Date Analyzed: 10/17/2013 14:12

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
91-57-6	2-Methylnaphthalene	ND		1.9	0.12
91-20-3	Naphthalene	1.2	J	1.9	0.14
88-74-4	2-Nitroaniline	ND		49	3.4
99-09-2	3-Nitroaniline	ND		49	3.1
100-01-6	4-Nitroaniline	ND		49	1.7
100-02-7	4-Nitrophenol	ND		49	6.3
98-95-3	Nitrobenzene	ND		19	0.82
621-64-7	N-Nitrosodi-n-propylamine	ND		1.9	0.30
86-30-6	N-Nitrosodiphenylamine	ND		9.7	0.83
85-01-8	Phenanthrene	ND		1.9	0.41
129-00-0	Pyrene	ND		1.9	0.15
59-50-7	4-Chloro-3-methylphenol	ND		9.7	0.73
95-57-8	2-Chlorophenol	ND		9.7	1.6
95-48-7	2-Methylphenol	ND		9.7	0.84
106-44-5	Methylphenol, 3 & 4	ND		9.7	0.88
120-83-2	2,4-Dichlorophenol	ND		1.9	0.32
105-67-9	2,4-Dimethylphenol	150		9.7	0.83
51-28-5	2,4-Dinitrophenol	ND		49	6.0
534-52-1	4,6-Dinitro-2-methylphenol	ND		49	2.1
88-75-5	2-Nitrophenol	ND		9.7	1.7
87-86-5	Pentachlorophenol	ND		9.7	0.64
108-95-2	Phenol	ND		1.9	0.56
95-95-4	2,4,5-Trichlorophenol	ND		9.7	1.5
88-06-2	2,4,6-Trichlorophenol	ND		9.7	1.7
98-86-2	Acetophenone	ND		9.7	0.78
1912-24-9	Atrazine	ND		9.7	0.87
100-52-7	Benzaldehyde	ND		9.7	1.5
92-52-4	1,1'-Biphenyl	ND		9.7	0.40
105-60-2	Caprolactam	42	J	49	12
111-91-1	Bis(2-chloroethoxy)methane	ND		9.7	0.56
111-44-4	Bis(2-chloroethyl)ether	ND		1.9	0.24

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-02-20131009 Lab Sample ID: 180-26012-1

Matrix: Water Lab File ID: N1017007.D

Analysis Method: 8270D Date Collected: 10/09/2013 11:15

Extract. Method: 3520C Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1030(mL) Date Analyzed: 10/17/2013 14:12

Con. Extract Vol.: 10.0(mL) Dilution Factor: 1

Injection Volume: 2(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	57		37-104
4165-62-2	Phenol-d5 (Surr)	52		30-102
321-60-8	2-Fluorobiphenyl	51		35-108
118-79-6	2,4,6-Tribromophenol (Surr)	70		33-122
367-12-4	2-Fluorophenol (Surr)	52		26-100
1718-51-0	Terphenyl-d14 (Surr)	36		25-130

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN101713D.b\N1017007.D
Lab Smp Id: 180-26012-A-1-B Client Smp ID: MB-MW-02-20131009
Inj Date : 17-OCT-2013 14:12
Operator : 3200 Inst ID: 733.i
Smp Info : 180-26012-A-1-B
Misc Info : 180-26012-A-1-B
Comment :
Method : \\PITSVR06\D\chem\733.i\TN101713D.b\T8270d.m
Meth Date : 17-Oct-2013 11:57 piccolinov Quant Type: ISTD
Cal Date : 09-OCT-2013 08:22 Cal File: N1009IC8.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: padepi.sub
Target Version: 4.14
Processing Host: PITPC-502

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)	
* 1	1,4-Dichlorobenzene-d4	152	6.282	6.271	(1.000)	99679	8.00000		
* 2	Naphthalene-d8	136	7.511	7.505	(1.000)	327565	8.00000		
* 3	Acenaphthene-d10	164	9.157	9.156	(1.000)	198447	8.00000		
* 4	Phenanthrene-d10	188	10.545	10.540	(1.000)	340744	8.00000		(M)
* 5	Chrysene-d12	240	14.109	14.113	(1.000)	471560	8.00000		
* 6	Perylene-d12	264	17.063	17.062	(1.000)	606500	8.00000		(M)
198	1,4-Dioxane	88	Compound Not Detected.						
10	N-Nitrosodimethylamine	74	Compound Not Detected.						
9	Pyridine	79	Compound Not Detected.						
16	Methyl methanesulfonate	80	Compound Not Detected.						
206	Benzaldehyde	77	Compound Not Detected.						
21	Aniline	93	Compound Not Detected.						
22	Phenol	94	Compound Not Detected.						
23	bis(2-Chloroethyl)ether	93	Compound Not Detected.						
24	2-Chlorophenol	128	Compound Not Detected.						
26	1,3-Dichlorobenzene	146	Compound Not Detected.						
27	1,4-Dichlorobenzene	146	Compound Not Detected.						
28	1,2-Dichlorobenzene	146	Compound Not Detected.						
217	Indene	116	6.544	6.528	(1.042)	5282	0.19115	0.19115	
29	Benzyl Alcohol	108	Compound Not Detected.						
30	2-Methylphenol	108	Compound Not Detected.						
31	2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.						
37	Acetophenone	105	6.672	6.661	(1.062)	2341	0.10459	0.10459	
32	N-Nitroso-di-n-propylamine	70	Compound Not Detected.						
192	4-Methylphenol	108	Compound Not Detected.						
34	Hexachloroethane	117	Compound Not Detected.						
35	Nitrobenzene	77	Compound Not Detected.						
36	N-Nitrosopyrrolidine	100	Compound Not Detected.						

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
41	Isophorone	82	Compound Not Detected.					
42	2-Nitrophenol	139	Compound Not Detected.					
43	2,4-Dimethylphenol	107	7.175	7.169	(0.955)	403533	31.1899	31.190
44	bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
48	2,4-Dichlorophenol	162	Compound Not Detected.					
49	Benzoic Acid	122	Compound Not Detected.					
50	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
51	Naphthalene	128	7.533	7.527	(1.003)	10327	0.23765	0.23765
52	4-Chloroaniline	127	Compound Not Detected.					
54	2,6-Dichlorophenol	162	Compound Not Detected.					
56	Hexachlorobutadiene	224	Compound Not Detected.					
208	Caprolactam	113	7.885	7.863	(1.050)	27246	8.72037	8.7204
59	4-Chloro-3-Methylphenol	107	Compound Not Detected.					
62	2-Methylnaphthalene	142	Compound Not Detected.					
63	1-Methylnaphthalene	142	8.275	8.274	(1.102)	4383	0.15822	0.15822
64	Hexachlorocyclopentadiene	236	Compound Not Detected.					
65	1,2,4,5-Tetrachlorobenzene	215	Compound Not Detected.					
66	2,4,6-Trichlorophenol	196	Compound Not Detected.					
67	2,4,5-Trichlorophenol	196	Compound Not Detected.					
209	1,1'-Biphenyl	154	Compound Not Detected.					
70	2-Chloronaphthalene	162	Compound Not Detected.					
73	2-Nitroaniline	65	Compound Not Detected.					
76	Dimethylphthalate	163	Compound Not Detected.					
78	2,6-Dinitrotoluene	165	Compound Not Detected.					
79	Acenaphthylene	152	Compound Not Detected.					
81	3-Nitroaniline	138	Compound Not Detected.					
82	Acenaphthene	153	Compound Not Detected.					
83	2,4-Dinitrophenol	184	Compound Not Detected.					
85	4-Nitrophenol	109	Compound Not Detected.					
86	Dibenzofuran	168	9.349	9.343	(1.021)	1495	0.03638	0.036376
87	2,4-Dinitrotoluene	165	Compound Not Detected.					
91	2,3,5,6-Tetrachlorophenol	231	Compound Not Detected.					
88	2,3,4,6-Tetrachlorophenol	231	Compound Not Detected.					
92	2-Naphthylamine	143	Compound Not Detected.					
93	Diethylphthalate	149	9.445	9.509	(1.032)	596623	19.8933	19.893(MH)
94	Fluorene	166	Compound Not Detected.					
95	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
96	4-Nitroaniline	138	Compound Not Detected.					
98	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
99	N-Nitrosodiphenylamine (1)	169	Compound Not Detected.					
100	1,2-Diphenylhydrazine	77	Compound Not Detected.					
106	4-Bromophenyl-phenylether	248	Compound Not Detected.					
107	Hexachlorobenzene	283	Compound Not Detected.					
210	Atrazine	200	Compound Not Detected.					
111	Pentachlorophenol	265	Compound Not Detected.					
115	Phenanthrene	178	Compound Not Detected.					
116	Anthracene	178	Compound Not Detected.					
119	Carbazole	167	Compound Not Detected.					
120	Di-n-Butylphthalate	149	Compound Not Detected.					
123	Fluoranthene	202	Compound Not Detected.					
124	Benzidine	184	Compound Not Detected.					
125	Pyrene	202	Compound Not Detected.					
131	Butylbenzylphthalate	149	Compound Not Detected.					
135	3,3'-Dichlorobenzidine	252	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
136 Benzo(a)Anthracene	228	Compound Not Detected.					
137 Chrysene	228	Compound Not Detected.					
139 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.					
140 Di-n-octylphthalate	149	Compound Not Detected.					
141 Benzo(b)fluoranthene	252	Compound Not Detected.					
142 Benzo(k)fluoranthene	252	Compound Not Detected.					
143 7,12-dimethylbenz[a]anthracen	256	Compound Not Detected.					
146 Benzo(a)pyrene	252	Compound Not Detected.					
149 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
150 Dibenz(a,h)anthracene	278	Compound Not Detected.					
151 Benzo(g,h,i)perylene	276	Compound Not Detected.					
$ 154 Nitrobenzene-d5	82	6.817	6.811	(0.908)	335236	22.8540	22.854
$ 155 2-Fluorobiphenyl	172	8.515	8.510	(0.930)	754513	20.5037	20.504
$ 156 Terphenyl-d14	244	12.335	12.340	(0.874)	792558	14.2038	14.204
$ 157 Phenol-d5	99	5.925	5.913	(0.943)	376422	20.6552	20.655
$ 158 2-Fluorophenol	112	4.910	4.888	(0.781)	321585	20.7329	20.733
$ 159 2,4,6-Tribromophenol	330	9.888	9.888	(0.938)	104169	27.8194	27.819(M)

QC Flag Legend

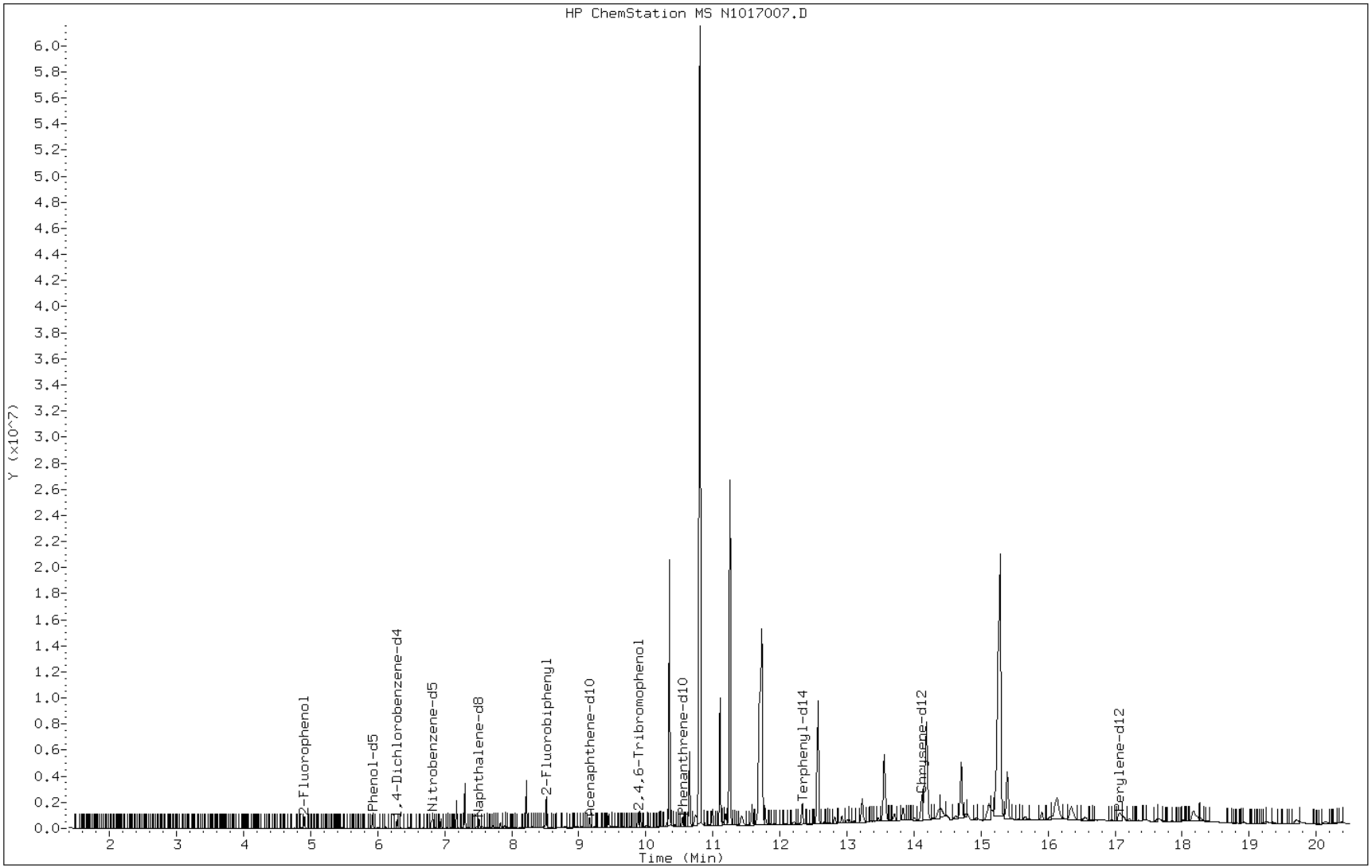
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: N1017007.D

Date: 17-OCT-2013 14:12

Client ID: MB-MW-02-20131009 Instrument: 733.i

Sample Info: 180-26012-A-1-B Operator: 3200



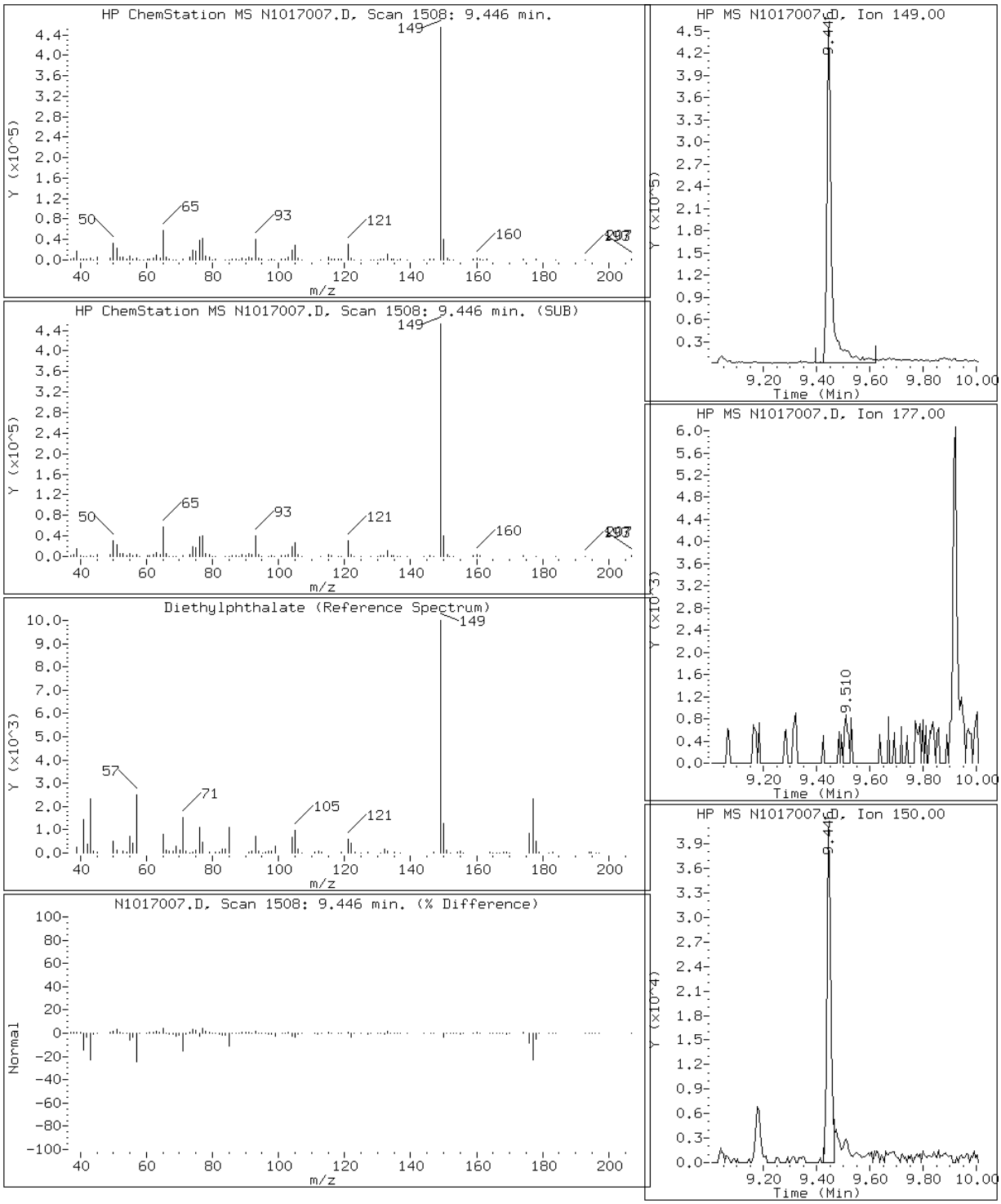
Data File: N1017007.D

Date: 17-OCT-2013 14:12

Client ID: MB-MW-02-20131009 Instrument: 733.i

Sample Info: 180-26012-A-1-B Operator: 3200

93 Diethylphthalate



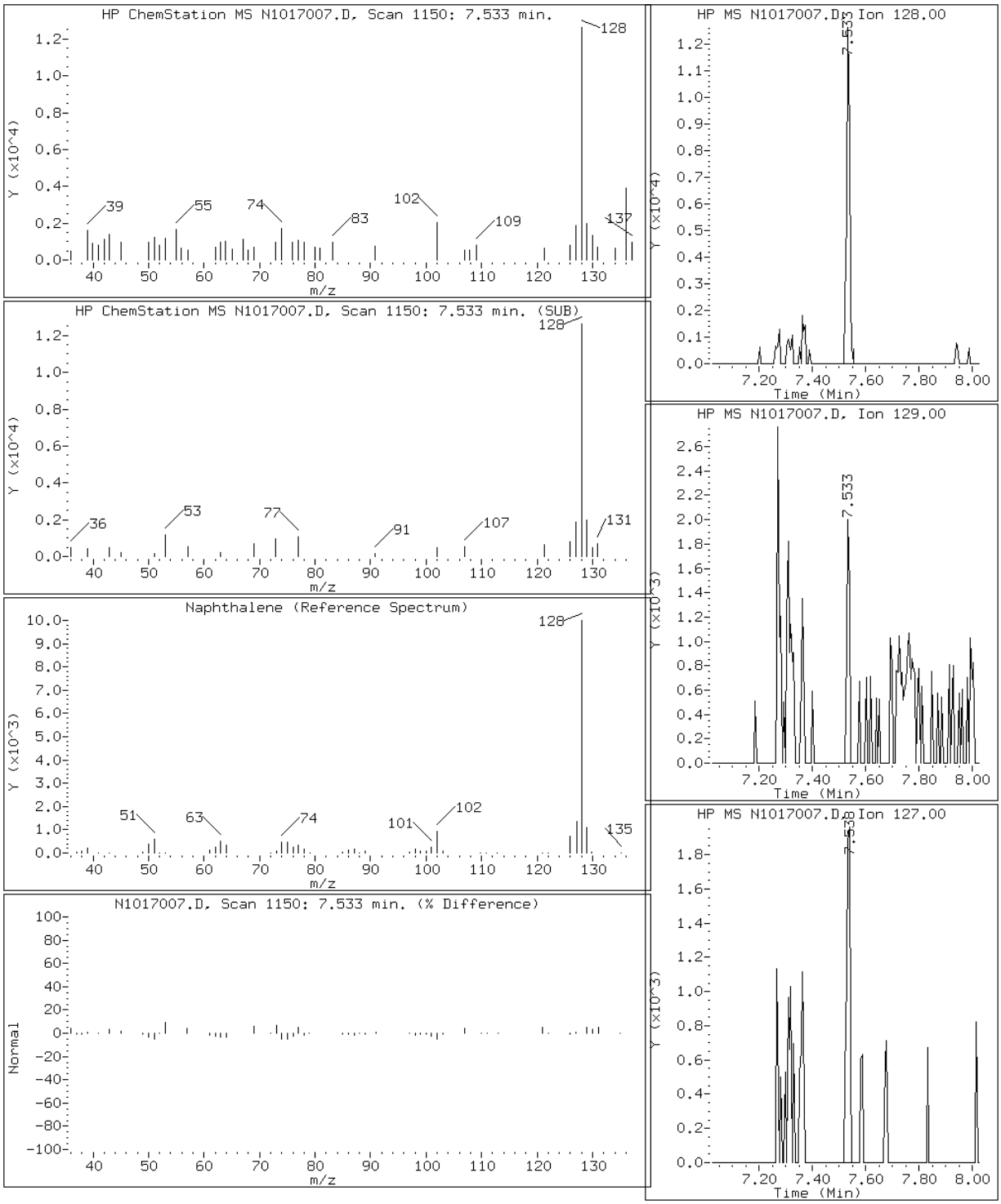
Data File: N1017007.D

Date: 17-OCT-2013 14:12

Client ID: MB-MW-02-20131009 Instrument: 733.i

Sample Info: 180-26012-A-1-B Operator: 3200

51 Naphthalene



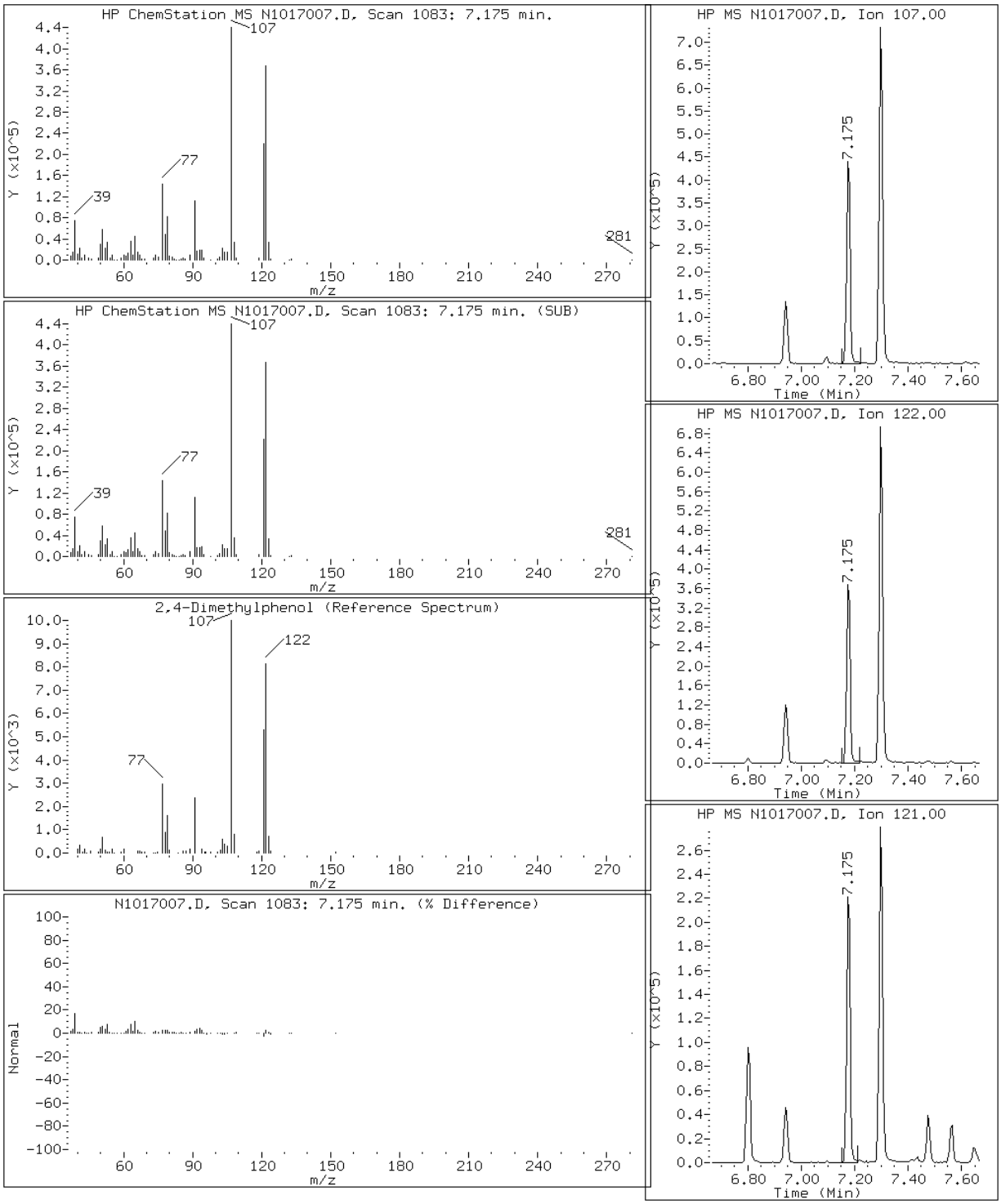
Data File: N1017007.D

Date: 17-OCT-2013 14:12

Client ID: MB-MW-02-20131009 Instrument: 733.i

Sample Info: 180-26012-A-1-B Operator: 3200

43 2,4-Dimethylphenol



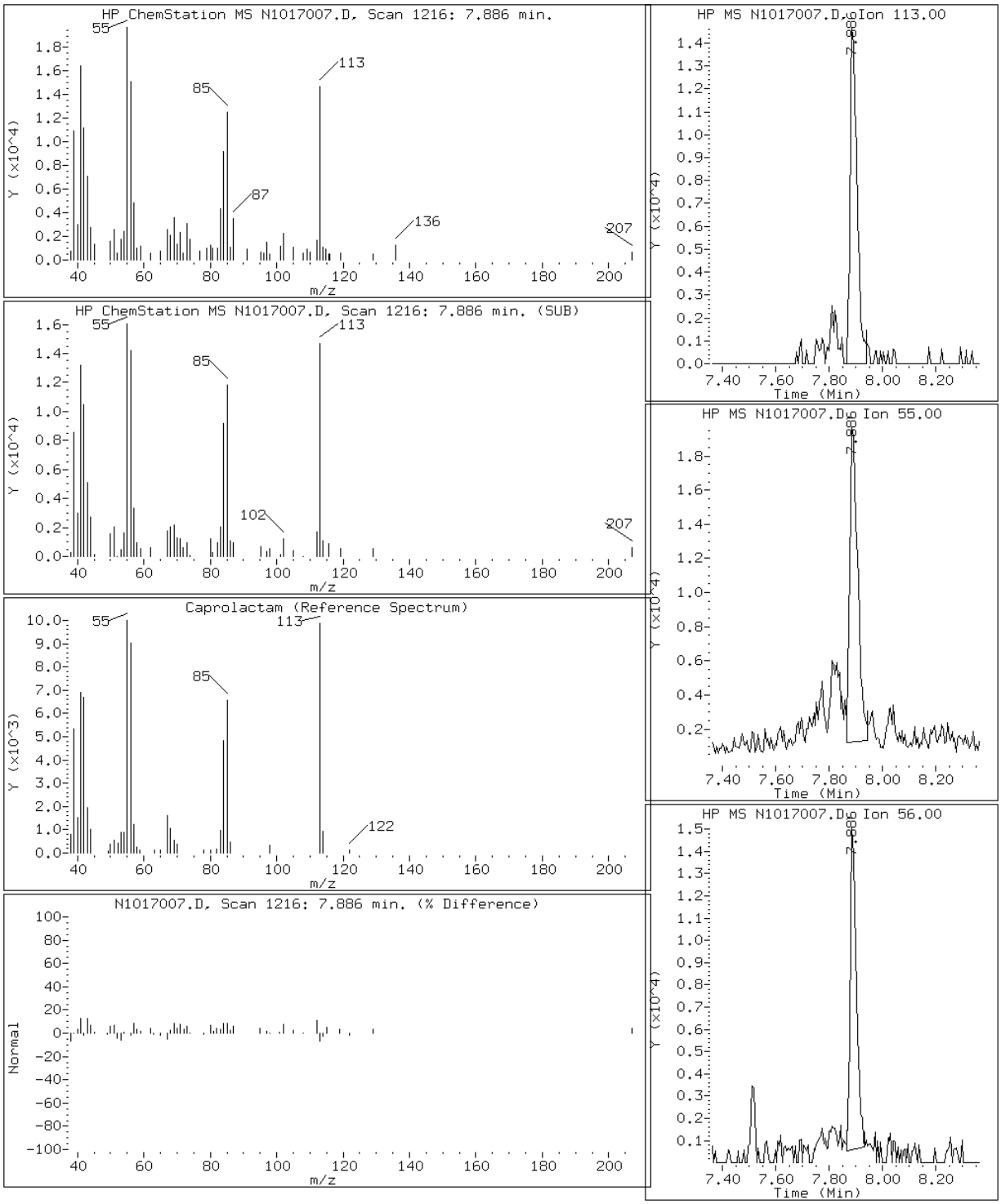
Data File: N1017007.D

Date: 17-OCT-2013 14:12

Client ID: MB-MW-02-20131009 Instrument: 733.i

Sample Info: 180-26012-A-1-B Operator: 3200

208 Caprolactam



Manual Integration Report

Data File: N1017007.D
Inj. Date and Time: 17-OCT-2013 14:12
Instrument ID: 733.i
Client ID: MB-MW-02-20131009
Compound: 93 Diethylphthalate
CAS #: 84-66-2
Report Date: 10/18/2013

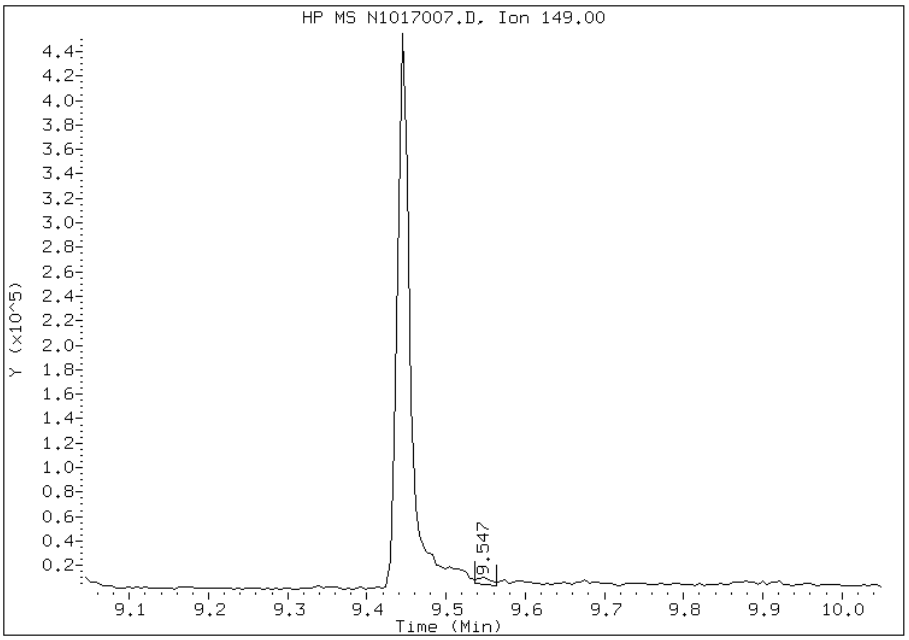
Processing Integration Results

RT: 9.55

Response: 6862

Amount: 0

Conc: 0



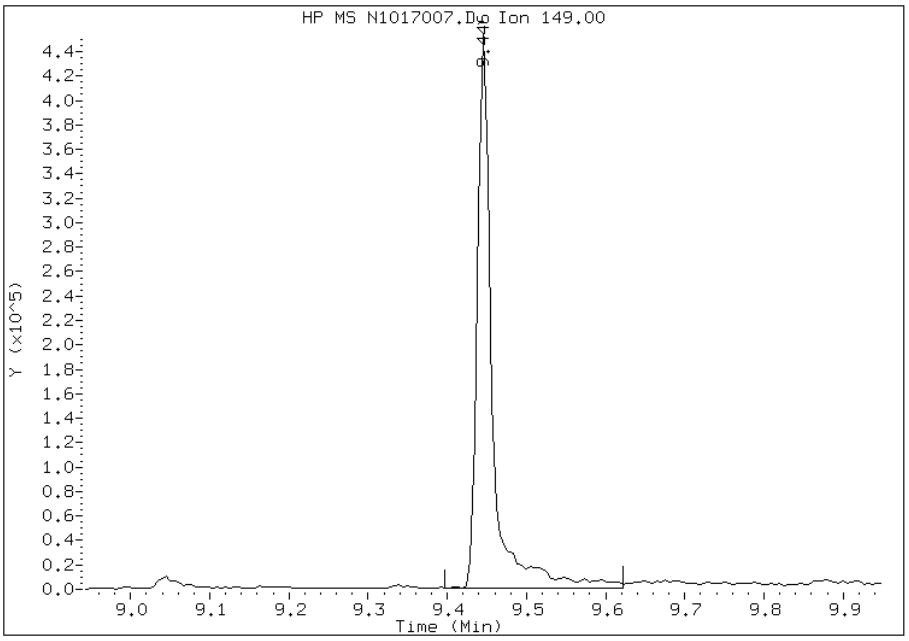
Manual Integration Results

RT: 9.45

Response: 596623

Amount: 20

Conc: 20



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 05:53
Manual Integration Reason: Peak Not Found

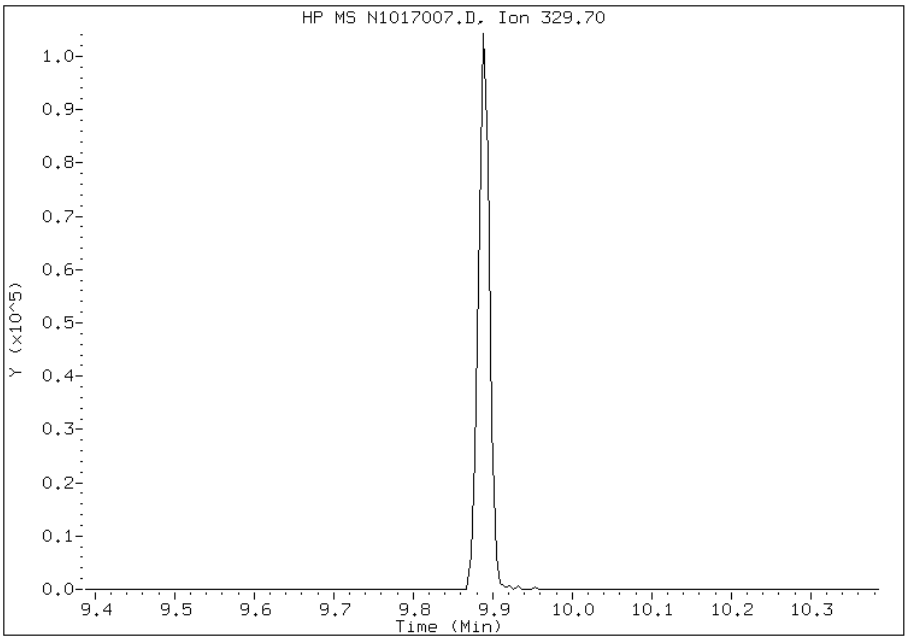
Manual Integration Report

Data File: N1017007.D
Inj. Date and Time: 17-OCT-2013 14:12
Instrument ID: 733.i
Client ID: MB-MW-02-20131009
Compound: 159 2,4,6-Tribromophenol
CAS #: 118-79-6
Report Date: 10/18/2013

Processing Integration Results

Not Detected

Expected RT: 9.89



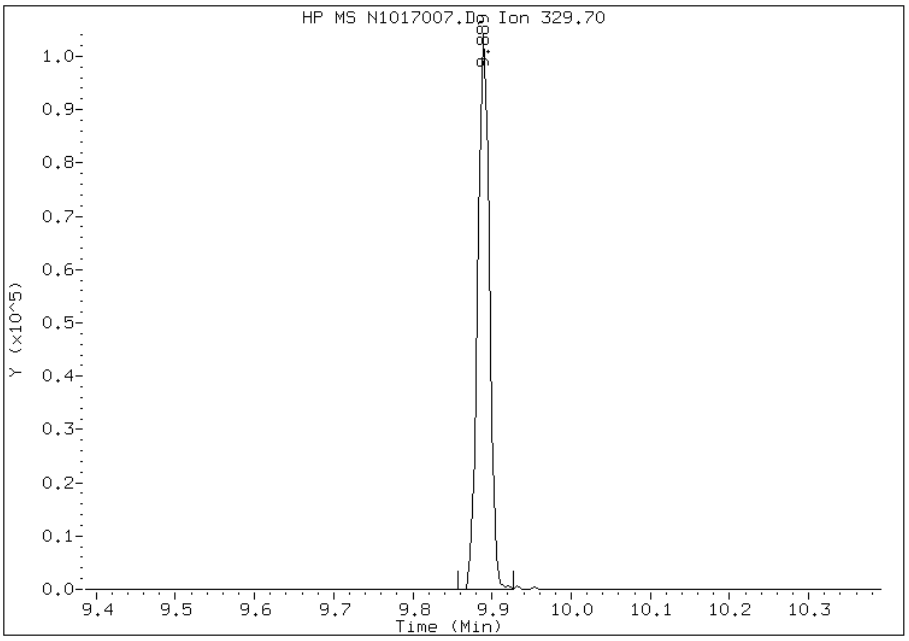
Manual Integration Results

RT: 9.89

Response: 104169

Amount: 28

Conc: 28



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 05:54
Manual Integration Reason: Peak Not Found

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-01-20131009 | Lab Sample ID: 180-26012-2

Matrix: Water | Lab File ID: N1017010.D

Analysis Method: 8270D | Date Collected: 10/09/2013 13:00

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1040(mL) | Date Analyzed: 10/17/2013 15:57

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	1.4	J	1.9	0.14
208-96-8	Acenaphthylene	ND		1.9	0.15
120-12-7	Anthracene	0.35	J	1.9	0.15
56-55-3	Benzo[a]anthracene	ND		1.9	0.14
50-32-8	Benzo[a]pyrene	ND		1.9	0.13
205-99-2	Benzo[b]fluoranthene	ND		1.9	0.15
191-24-2	Benzo[g,h,i]perylene	ND		1.9	0.15
207-08-9	Benzo[k]fluoranthene	ND		1.9	0.53
117-81-7	Bis(2-ethylhexyl) phthalate	ND		19	12
108-60-1	2,2'-oxybis[1-chloropropane]	ND		1.9	0.19
101-55-3	4-Bromophenyl phenyl ether	ND		9.6	0.61
85-68-7	Butyl benzyl phthalate	ND		9.6	1.4
86-74-8	Carbazole	0.85	J	1.9	0.15
106-47-8	4-Chloroaniline	ND		9.6	0.85
91-58-7	2-Chloronaphthalene	ND		1.9	0.15
7005-72-3	4-Chlorophenyl phenyl ether	ND		9.6	0.48
218-01-9	Chrysene	ND		1.9	0.13
53-70-3	Dibenz(a,h)anthracene	ND		1.9	0.15
132-64-9	Dibenzofuran	ND		9.6	0.59
84-74-2	Di-n-butyl phthalate	ND		9.6	1.2
91-94-1	3,3'-Dichlorobenzidine	ND		9.6	1.1
84-66-2	Diethyl phthalate	ND		9.6	1.4
131-11-3	Dimethyl phthalate	ND		9.6	0.74
121-14-2	2,4-Dinitrotoluene	ND		9.6	0.52
606-20-2	2,6-Dinitrotoluene	ND		9.6	0.77
117-84-0	Di-n-octyl phthalate	ND		9.6	2.0
206-44-0	Fluoranthene	ND		1.9	0.16
86-73-7	Fluorene	0.51	J	1.9	0.21
118-74-1	Hexachlorobenzene	ND		1.9	0.18
87-68-3	Hexachlorobutadiene	ND		1.9	0.16
77-47-4	Hexachlorocyclopentadiene	ND		9.6	0.50
67-72-1	Hexachloroethane	ND		9.6	0.60
193-39-5	Indeno[1,2,3-cd]pyrene	ND		1.9	0.19
78-59-1	Isophorone	ND		9.6	0.62

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-01-20131009 | Lab Sample ID: 180-26012-2

Matrix: Water | Lab File ID: N1017010.D

Analysis Method: 8270D | Date Collected: 10/09/2013 13:00

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1040(mL) | Date Analyzed: 10/17/2013 15:57

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
91-57-6	2-Methylnaphthalene	0.28	J	1.9	0.12
91-20-3	Naphthalene	23		1.9	0.13
88-74-4	2-Nitroaniline	ND		48	3.4
99-09-2	3-Nitroaniline	ND		48	3.1
100-01-6	4-Nitroaniline	ND		48	1.7
100-02-7	4-Nitrophenol	ND		48	6.2
98-95-3	Nitrobenzene	ND		19	0.81
621-64-7	N-Nitrosodi-n-propylamine	ND		1.9	0.30
86-30-6	N-Nitrosodiphenylamine	ND		9.6	0.82
85-01-8	Phenanthrene	0.42	J	1.9	0.41
129-00-0	Pyrene	ND		1.9	0.15
59-50-7	4-Chloro-3-methylphenol	ND		9.6	0.73
95-57-8	2-Chlorophenol	ND		9.6	1.6
95-48-7	2-Methylphenol	ND		9.6	0.83
106-44-5	Methylphenol, 3 & 4	ND		9.6	0.87
120-83-2	2,4-Dichlorophenol	ND		1.9	0.32
105-67-9	2,4-Dimethylphenol	ND		9.6	0.82
51-28-5	2,4-Dinitrophenol	ND		48	5.9
534-52-1	4,6-Dinitro-2-methylphenol	ND		48	2.1
88-75-5	2-Nitrophenol	ND		9.6	1.6
87-86-5	Pentachlorophenol	ND		9.6	0.64
108-95-2	Phenol	ND		1.9	0.56
95-95-4	2,4,5-Trichlorophenol	ND		9.6	1.5
88-06-2	2,4,6-Trichlorophenol	ND		9.6	1.7
98-86-2	Acetophenone	ND		9.6	0.77
1912-24-9	Atrazine	ND		9.6	0.86
100-52-7	Benzaldehyde	ND		9.6	1.4
92-52-4	1,1'-Biphenyl	ND		9.6	0.40
105-60-2	Caprolactam	ND		48	11
111-91-1	Bis(2-chloroethoxy)methane	ND		9.6	0.56
111-44-4	Bis(2-chloroethyl)ether	ND		1.9	0.24

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-01-20131009 Lab Sample ID: 180-26012-2

Matrix: Water Lab File ID: N1017010.D

Analysis Method: 8270D Date Collected: 10/09/2013 13:00

Extract. Method: 3520C Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1040(mL) Date Analyzed: 10/17/2013 15:57

Con. Extract Vol.: 10.0(mL) Dilution Factor: 1

Injection Volume: 2(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	52		37-104
4165-62-2	Phenol-d5 (Surr)	38		30-102
321-60-8	2-Fluorobiphenyl	56		35-108
118-79-6	2,4,6-Tribromophenol (Surr)	67		33-122
367-12-4	2-Fluorophenol (Surr)	42		26-100
1718-51-0	Terphenyl-d14 (Surr)	37		25-130

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN101713D.b\N1017010.D
Lab Smp Id: 180-26012-A-2-A Client Smp ID: MB-MW-01-20131009
Inj Date : 17-OCT-2013 15:57
Operator : 3200 Inst ID: 733.i
Smp Info : 180-26012-A-2-A
Misc Info : 180-26012-A-2-A
Comment :
Method : \\PITSVR06\D\chem\733.i\TN101713D.b\T8270d.m
Meth Date : 17-Oct-2013 11:57 piccolinov Quant Type: ISTD
Cal Date : 09-OCT-2013 08:22 Cal File: N1009IC8.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: padepi.sub
Target Version: 4.14
Processing Host: PITPC-502

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
* 1	1,4-Dichlorobenzene-d4	152	6.276	6.271	(1.000)	151911	8.00000	
* 2	Naphthalene-d8	136	7.504	7.505	(1.000)	500291	8.00000	
* 3	Acenaphthene-d10	164	9.150	9.156	(1.000)	266450	8.00000	
* 4	Phenanthrene-d10	188	10.533	10.540	(1.000)	427432	8.00000	
* 5	Chrysene-d12	240	14.086	14.113	(1.000)	444854	8.00000	
* 6	Perylene-d12	264	17.024	17.062	(1.000)	408619	8.00000	
198	1,4-Dioxane	88	Compound Not Detected.					
10	N-Nitrosodimethylamine	74	Compound Not Detected.					
9	Pyridine	79	Compound Not Detected.					
16	Methyl methanesulfonate	80	Compound Not Detected.					
206	Benzaldehyde	77	Compound Not Detected.					
21	Aniline	93	Compound Not Detected.					
22	Phenol	94	Compound Not Detected.					
23	bis(2-Chloroethyl)ether	93	Compound Not Detected.					
24	2-Chlorophenol	128	Compound Not Detected.					
26	1,3-Dichlorobenzene	146	Compound Not Detected.					
27	1,4-Dichlorobenzene	146	Compound Not Detected.					
28	1,2-Dichlorobenzene	146	Compound Not Detected.					
217	Indene	116	Compound Not Detected.					
29	Benzyl Alcohol	108	Compound Not Detected.					
30	2-Methylphenol	108	Compound Not Detected.					
31	2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
37	Acetophenone	105	Compound Not Detected.					
32	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
192	4-Methylphenol	108	Compound Not Detected.					
34	Hexachloroethane	117	Compound Not Detected.					
35	Nitrobenzene	77	Compound Not Detected.					
36	N-Nitrosopyrrolidine	100	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
41	Isophorone	82	Compound Not Detected.					
42	2-Nitrophenol	139	Compound Not Detected.					
43	2,4-Dimethylphenol	107	Compound Not Detected.					
44	bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
48	2,4-Dichlorophenol	162	Compound Not Detected.					
49	Benzoic Acid	122	Compound Not Detected.					
50	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
51	Naphthalene	128	7.520	7.527	(1.002)	312357	4.70645	4.7064
52	4-Chloroaniline	127	Compound Not Detected.					
54	2,6-Dichlorophenol	162	Compound Not Detected.					
56	Hexachlorobutadiene	224	Compound Not Detected.					
208	Caprolactam	113	7.878	7.863	(1.050)	3259	0.68295	0.68295
59	4-Chloro-3-Methylphenol	107	Compound Not Detected.					
62	2-Methylnaphthalene	142	8.172	8.178	(1.089)	2678	0.05790	0.057902
63	1-Methylnaphthalene	142	8.263	8.274	(1.101)	5651	0.13356	0.13356
64	Hexachlorocyclopentadiene	236	Compound Not Detected.					
65	1,2,4,5-Tetrachlorobenzene	215	Compound Not Detected.					
66	2,4,6-Trichlorophenol	196	Compound Not Detected.					
67	2,4,5-Trichlorophenol	196	Compound Not Detected.					
209	1,1'-Biphenyl	154	Compound Not Detected.					
70	2-Chloronaphthalene	162	Compound Not Detected.					
73	2-Nitroaniline	65	Compound Not Detected.					
76	Dimethylphthalate	163	Compound Not Detected.					
78	2,6-Dinitrotoluene	165	Compound Not Detected.					
79	Acenaphthylene	152	Compound Not Detected.					
81	3-Nitroaniline	138	Compound Not Detected.					
82	Acenaphthene	153	9.176	9.188	(1.003)	11674	0.28916	0.28916
83	2,4-Dinitrophenol	184	Compound Not Detected.					
85	4-Nitrophenol	109	Compound Not Detected.					
86	Dibenzofuran	168	9.337	9.343	(1.020)	1591	0.02883	0.028832
87	2,4-Dinitrotoluene	165	Compound Not Detected.					
91	2,3,5,6-Tetrachlorophenol	231	Compound Not Detected.					
88	2,3,4,6-Tetrachlorophenol	231	Compound Not Detected.					
92	2-Naphthylamine	143	Compound Not Detected.					
93	Diethylphthalate	149	Compound Not Detected.					
94	Fluorene	166	9.652	9.663	(1.055)	4721	0.10641	0.10641
95	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
96	4-Nitroaniline	138	Compound Not Detected.					
98	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
99	N-Nitrosodiphenylamine (1)	169	Compound Not Detected.					
100	1,2-Diphenylhydrazine	77	Compound Not Detected.					
106	4-Bromophenyl-phenylether	248	Compound Not Detected.					
107	Hexachlorobenzene	283	Compound Not Detected.					
210	Atrazine	200	Compound Not Detected.					
111	Pentachlorophenol	265	Compound Not Detected.					
115	Phenanthrene	178	10.560	10.566	(1.003)	5208	0.08699	0.086994(M)
116	Anthracene	178	10.613	10.614	(1.008)	4285	0.07223	0.072226(M)
119	Carbazole	167	10.752	10.759	(1.021)	9113	0.17747	0.17747
120	Di-n-Butylphthalate	149	Compound Not Detected.					
123	Fluoranthene	202	Compound Not Detected.					
124	Benzidine	184	Compound Not Detected.					
125	Pyrene	202	Compound Not Detected.					
131	Butylbenzylphthalate	149	Compound Not Detected.					
135	3,3'-Dichlorobenzidine	252	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
136 Benzo(a)Anthracene	228	Compound Not Detected.					
137 Chrysene	228	Compound Not Detected.					
139 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.					
140 Di-n-octylphthalate	149	Compound Not Detected.					
141 Benzo(b)fluoranthene	252	Compound Not Detected.					
142 Benzo(k)fluoranthene	252	Compound Not Detected.					
143 7,12-dimethylbenz[a]anthracen	256	Compound Not Detected.					
146 Benzo(a)pyrene	252	Compound Not Detected.					
149 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
150 Dibenz(a,h)anthracene	278	Compound Not Detected.					
151 Benzo(g,h,i)perylene	276	Compound Not Detected.					
$ 154 Nitrobenzene-d5	82	6.810	6.811	(0.907)	468475	20.9109	20.911
$ 155 2-Fluorobiphenyl	172	8.503	8.510	(0.929)	1100109	22.2653	22.265
$ 156 Terphenyl-d14	244	12.318	12.340	(0.874)	780213	14.8220	14.822
$ 157 Phenol-d5	99	5.923	5.913	(0.944)	425633	15.3251	15.325
$ 158 2-Fluorophenol	112	4.908	4.888	(0.782)	393523	16.6475	16.647
$ 159 2,4,6-Tribromophenol	330	9.882	9.888	(0.938)	125256	26.6666	26.667

QC Flag Legend

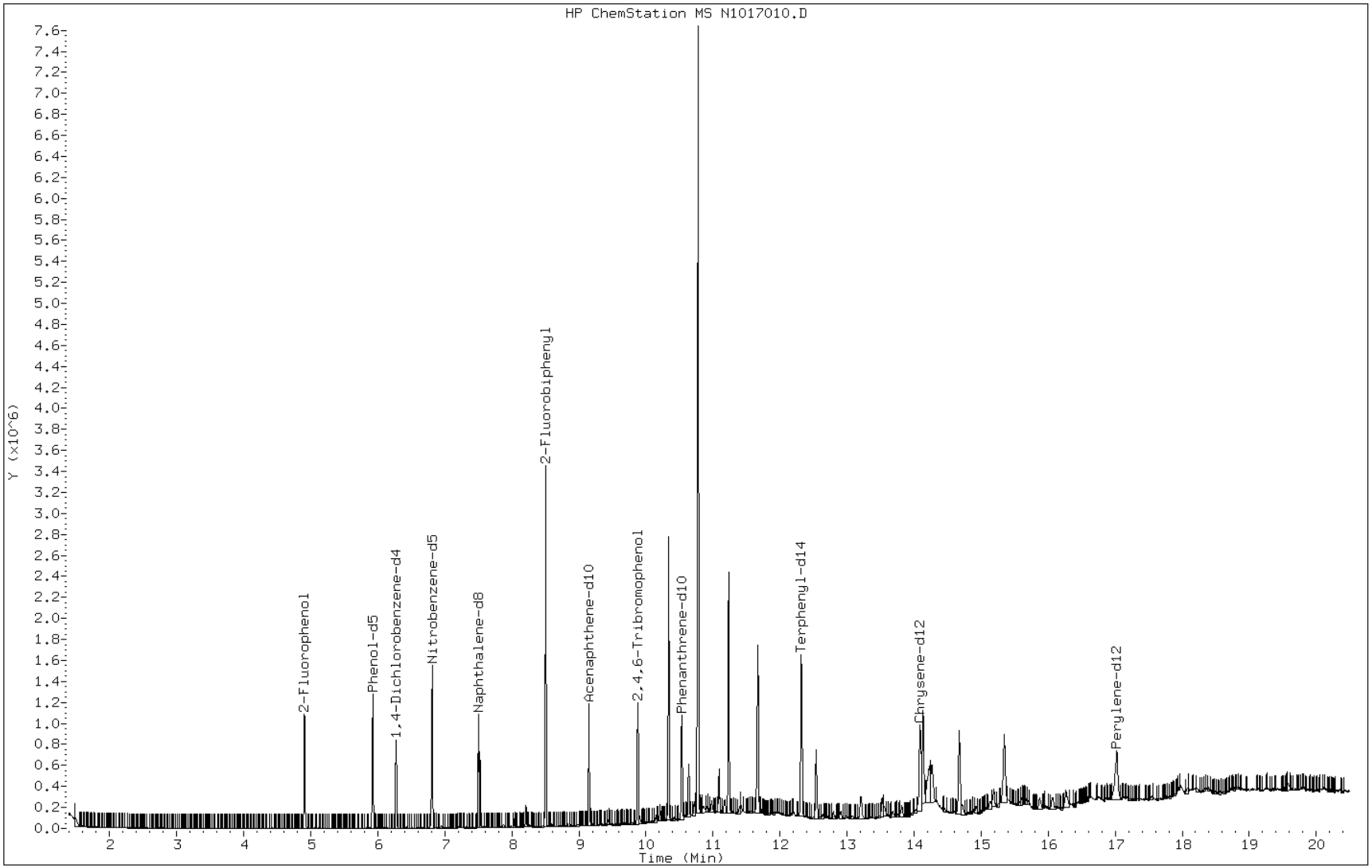
M - Compound response manually integrated.

Data File: N1017010.D

Date: 17-OCT-2013 15:57

Client ID: MB-MW-01-20131009 Instrument: 733.i

Sample Info: 180-26012-A-2-A Operator: 3200



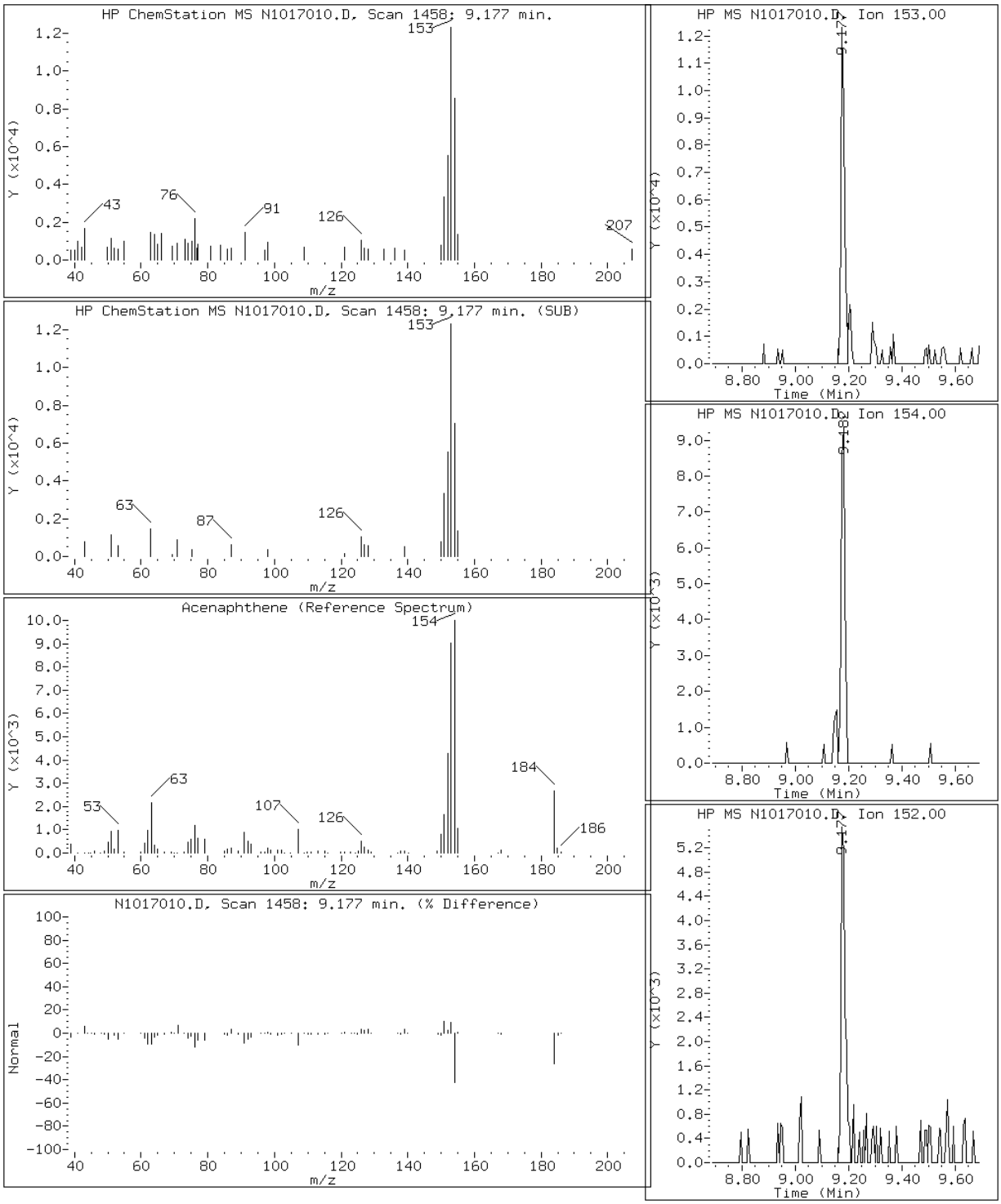
Data File: N1017010.D

Date: 17-OCT-2013 15:57

Client ID: MB-MW-01-20131009 Instrument: 733.i

Sample Info: 180-26012-A-2-A Operator: 3200

82 Acenaphthene



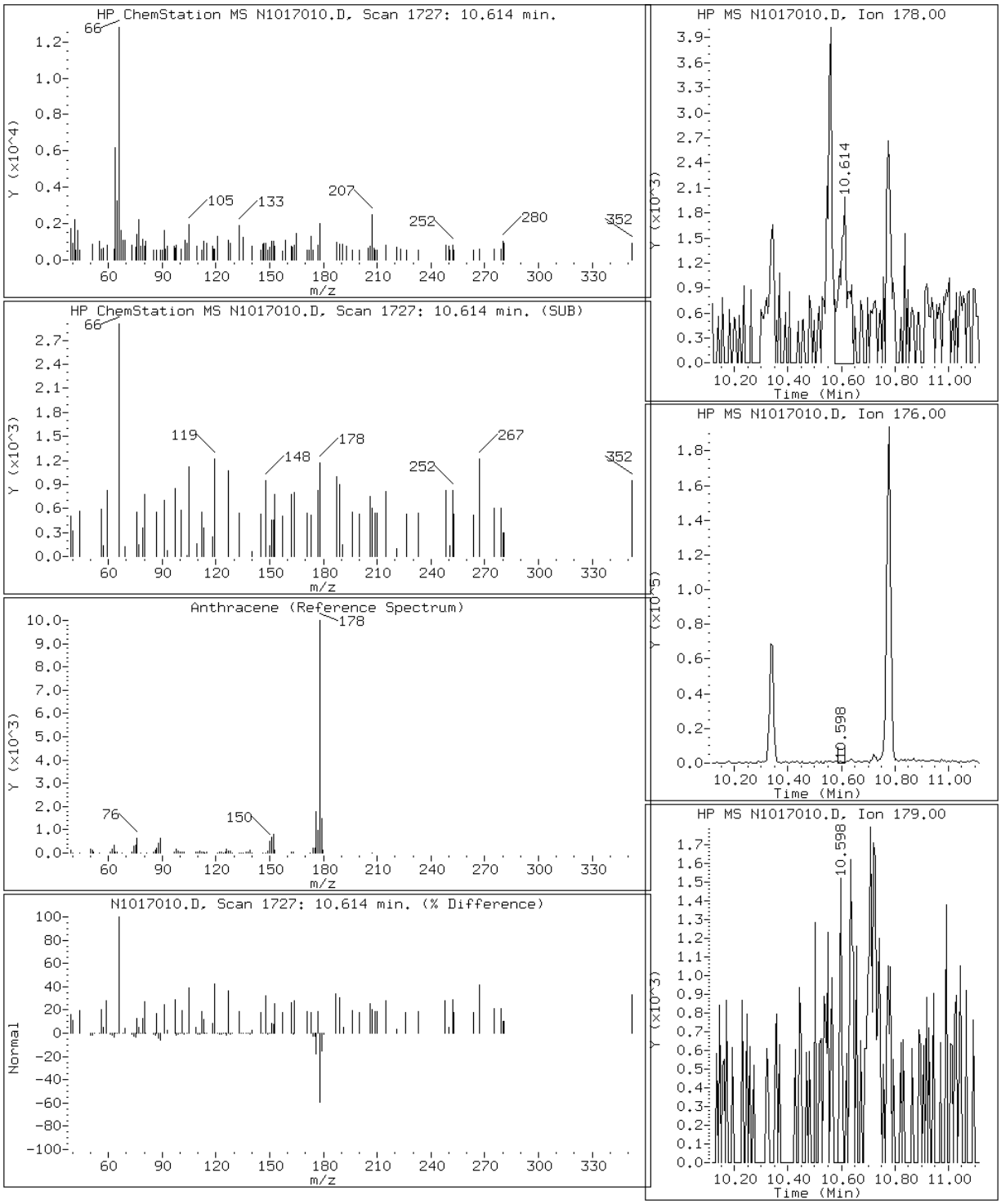
Data File: N1017010.D

Date: 17-OCT-2013 15:57

Client ID: MB-MW-01-20131009 Instrument: 733.i

Sample Info: 180-26012-A-2-A Operator: 3200

116 Anthracene



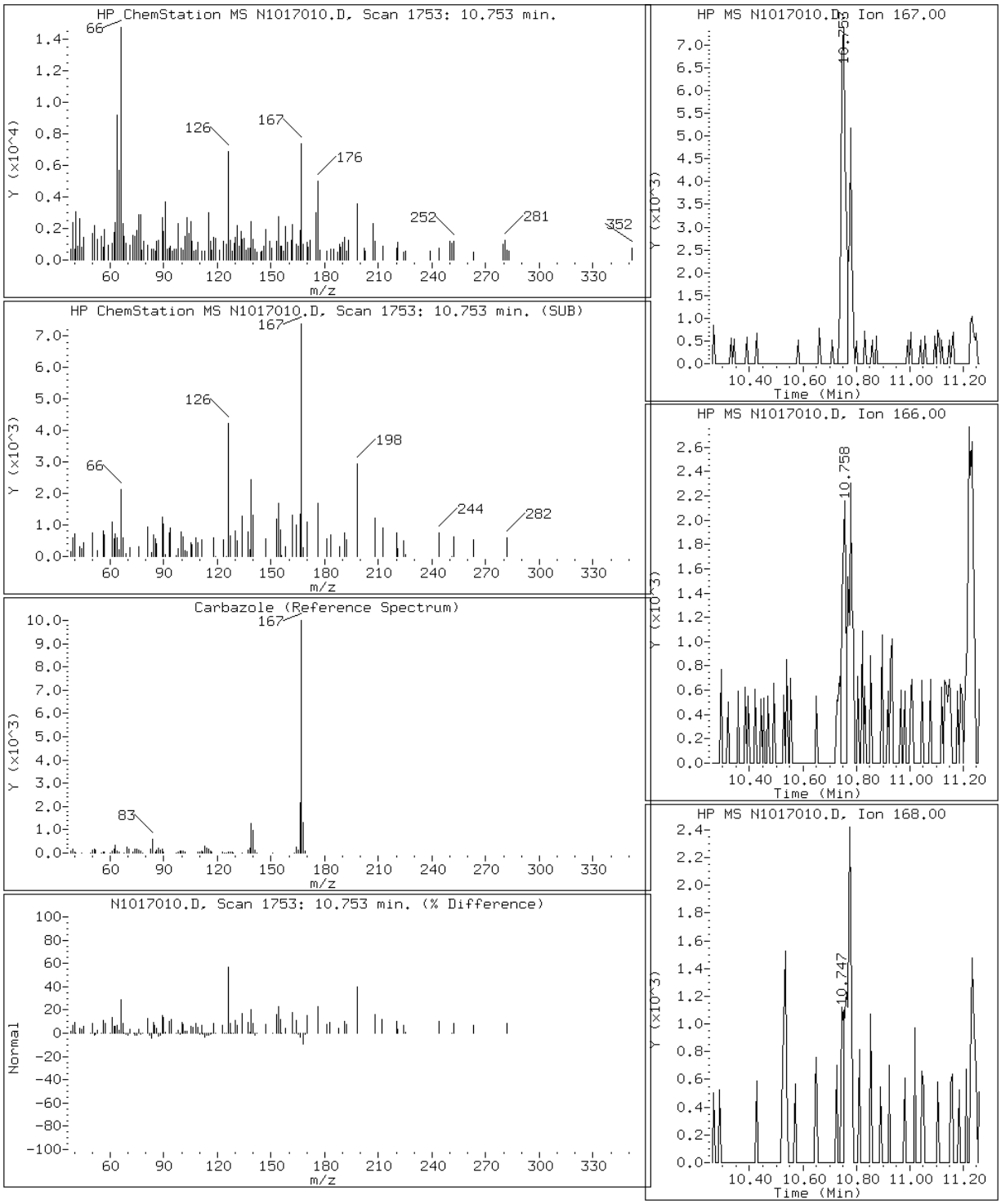
Data File: N1017010.D

Date: 17-OCT-2013 15:57

Client ID: MB-MW-01-20131009 Instrument: 733.i

Sample Info: 180-26012-A-2-A Operator: 3200

119 Carbazole



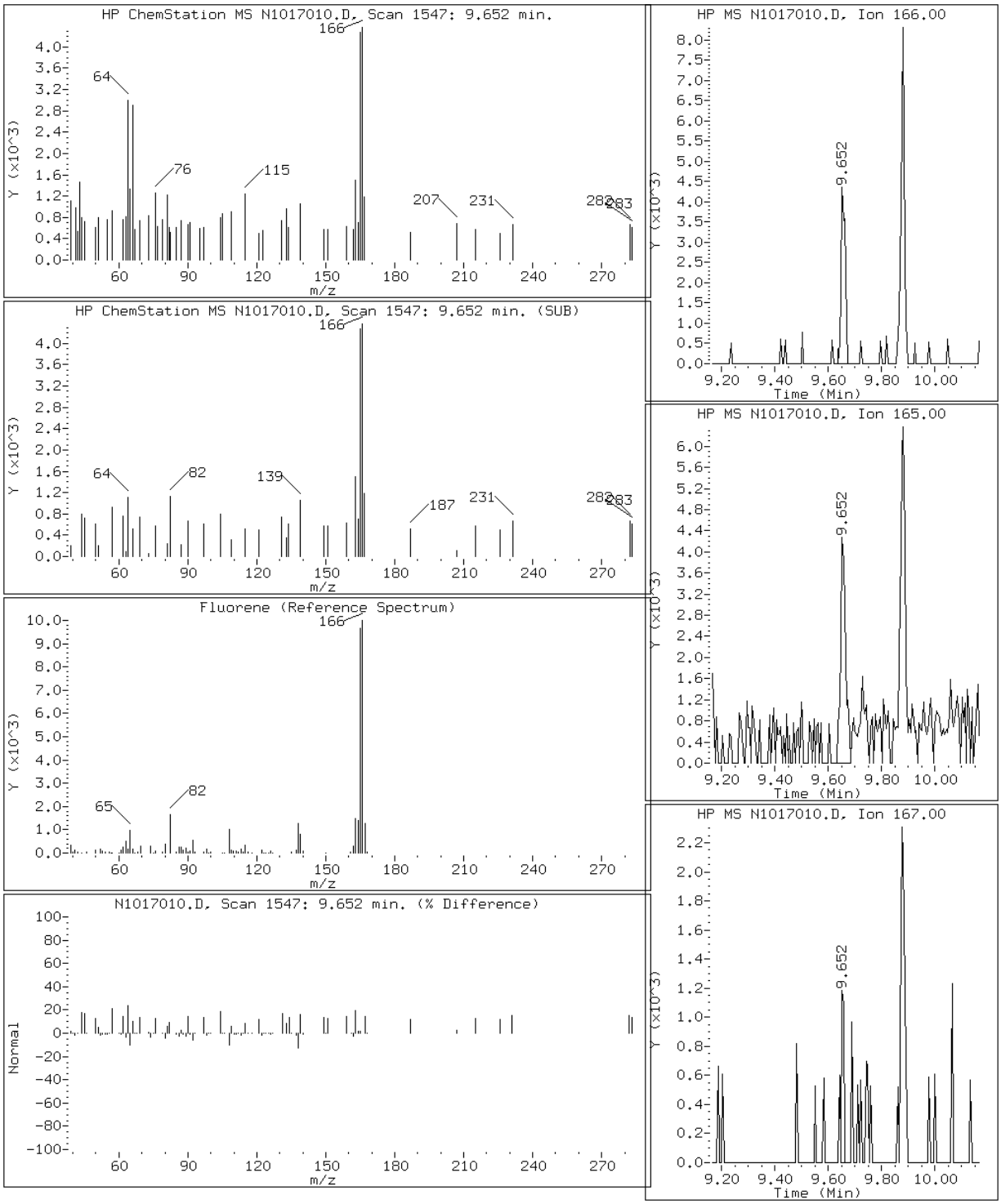
Data File: N1017010.D

Date: 17-OCT-2013 15:57

Client ID: MB-MW-01-20131009 Instrument: 733.i

Sample Info: 180-26012-A-2-A Operator: 3200

94 Fluorene



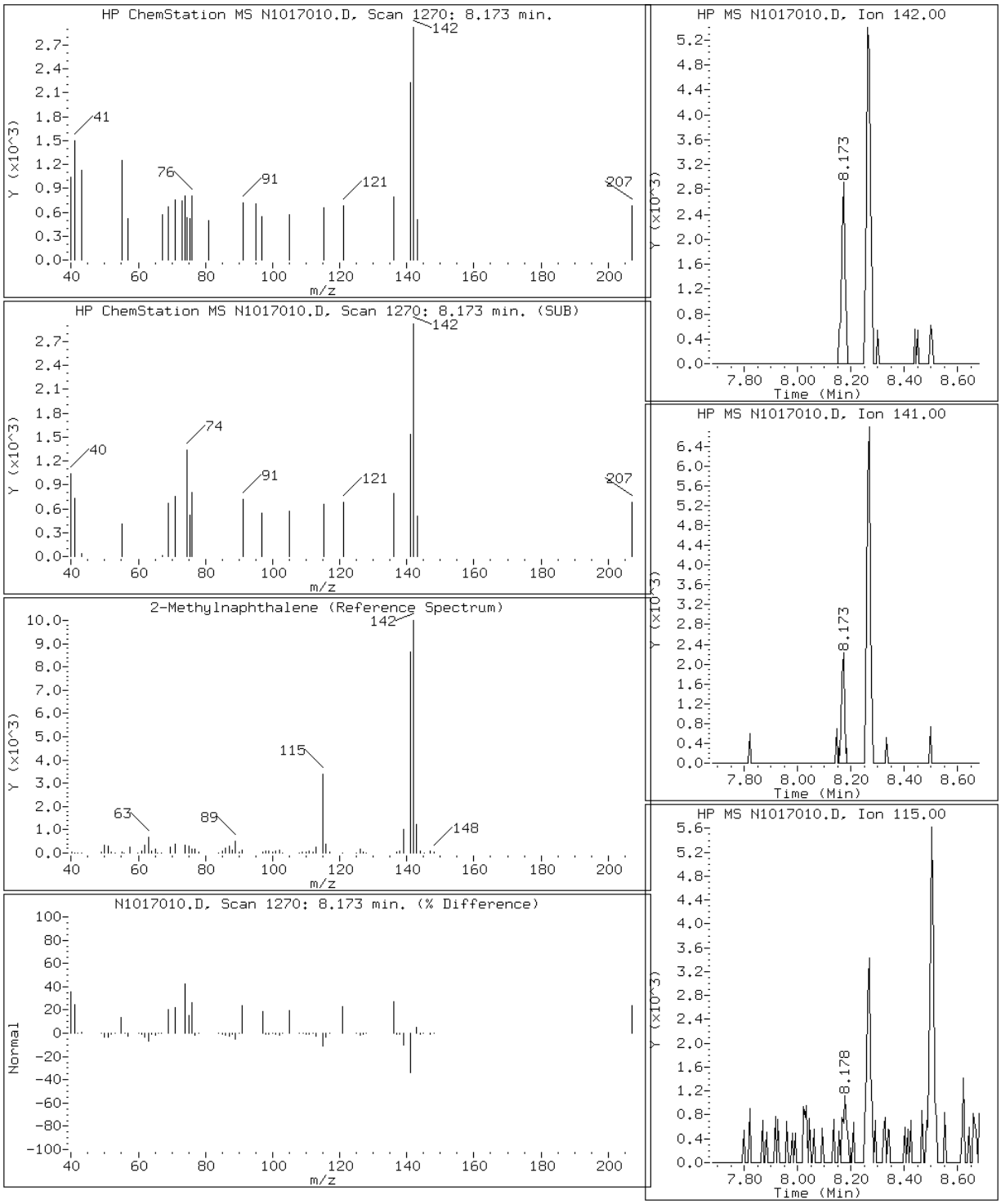
Data File: N1017010.D

Date: 17-OCT-2013 15:57

Client ID: MB-MW-01-20131009 Instrument: 733.i

Sample Info: 180-26012-A-2-A Operator: 3200

62 2-Methylnaphthalene



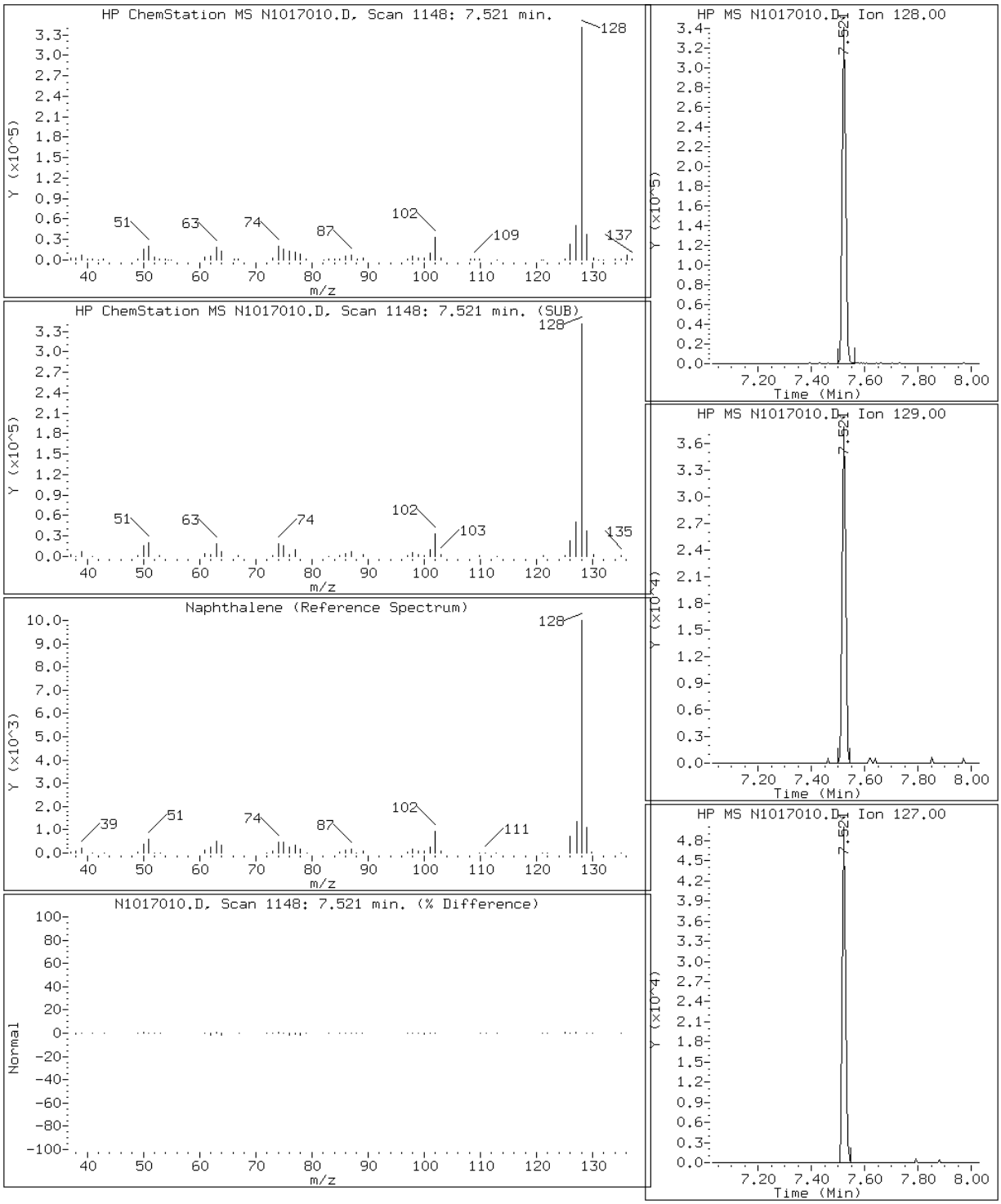
Data File: N1017010.D

Date: 17-OCT-2013 15:57

Client ID: MB-MW-01-20131009 Instrument: 733.i

Sample Info: 180-26012-A-2-A Operator: 3200

51 Naphthalene



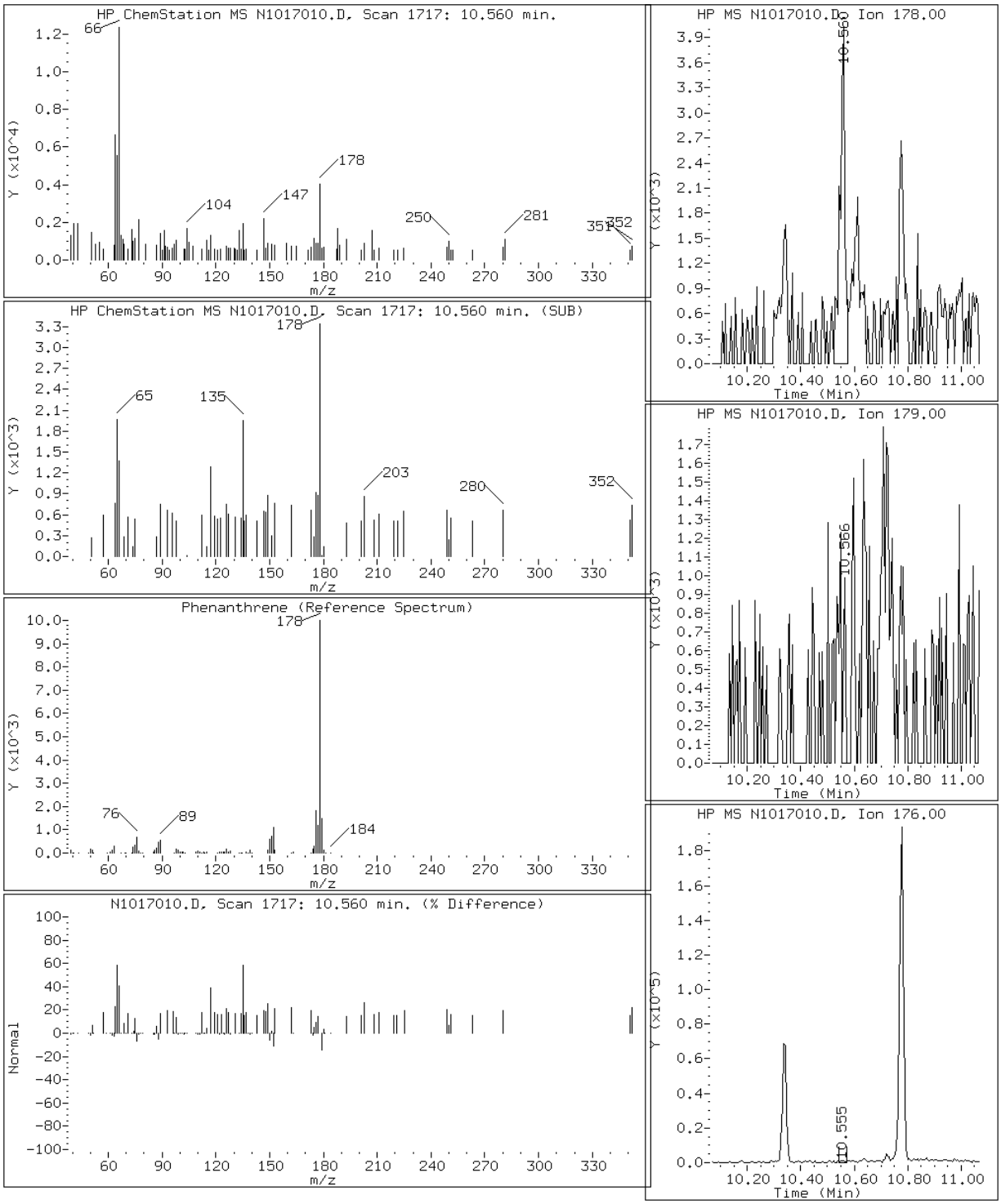
Data File: N1017010.D

Date: 17-OCT-2013 15:57

Client ID: MB-MW-01-20131009 Instrument: 733.i

Sample Info: 180-26012-A-2-A Operator: 3200

115 Phenanthrene



Manual Integration Report

Data File: N1017010.D
Inj. Date and Time: 17-OCT-2013 15:57
Instrument ID: 733.i
Client ID: MB-MW-01-20131009
Compound: 116 Anthracene
CAS #: 120-12-7
Report Date: 10/18/2013

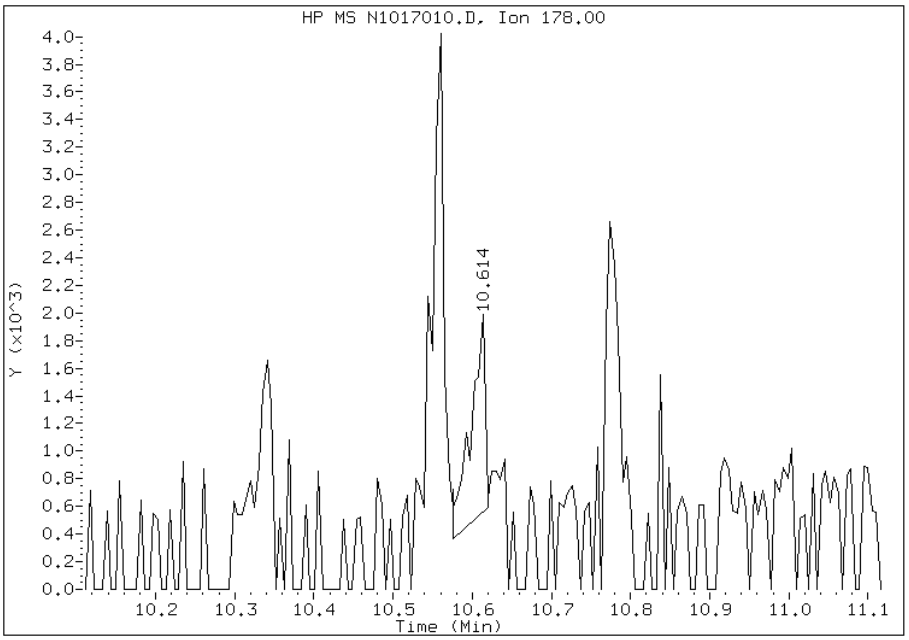
Processing Integration Results

RT: 10.61

Response: 1768

Amount: 0

Conc: 0



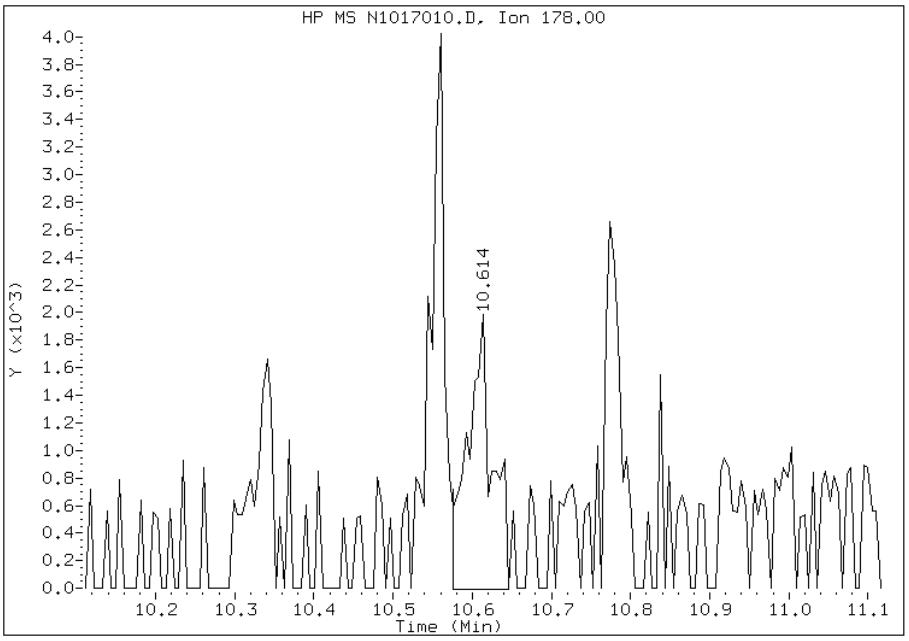
Manual Integration Results

RT: 10.61

Response: 4285

Amount: 0

Conc: 0



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 06:03
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1017010.D
Inj. Date and Time: 17-OCT-2013 15:57
Instrument ID: 733.i
Client ID: MB-MW-01-20131009
Compound: 115 Phenanthrene
CAS #: 85-01-8
Report Date: 10/18/2013

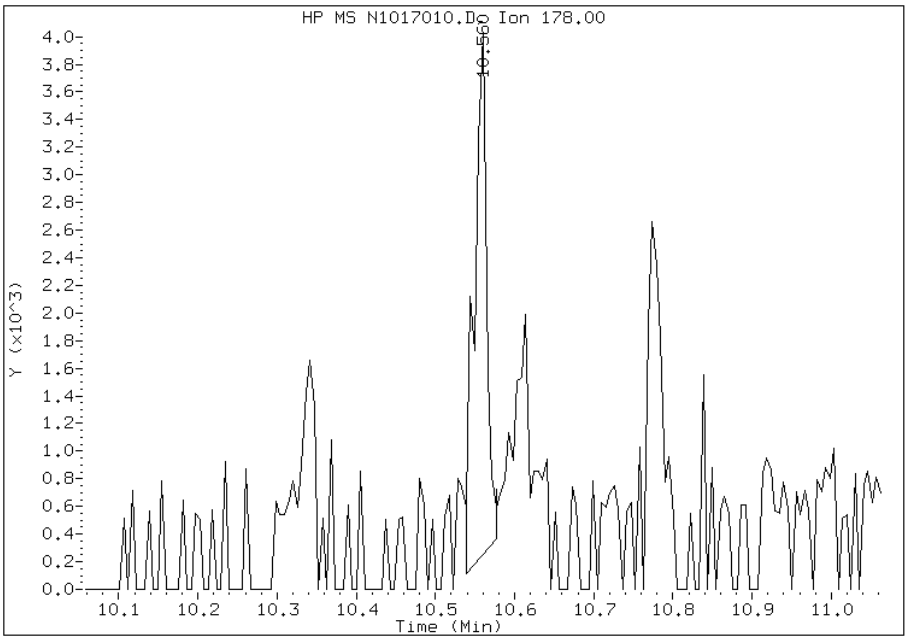
Processing Integration Results

RT: 10.56

Response: 4090

Amount: 0

Conc: 0



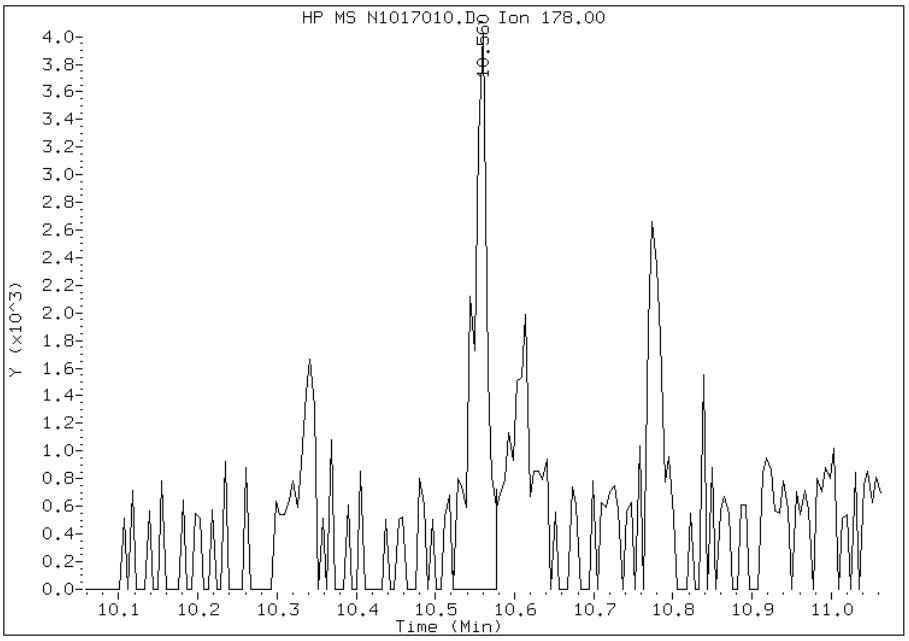
Manual Integration Results

RT: 10.56

Response: 5208

Amount: 0

Conc: 0



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 06:03
Manual Integration Reason: Poor Chromatography

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-03-20131009 | Lab Sample ID: 180-26012-3

Matrix: Water | Lab File ID: N1017011.D

Analysis Method: 8270D | Date Collected: 10/09/2013 14:05

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1040(mL) | Date Analyzed: 10/17/2013 16:23

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	0.24	J	1.9	0.14
208-96-8	Acenaphthylene	ND		1.9	0.15
120-12-7	Anthracene	ND		1.9	0.15
56-55-3	Benzo[a]anthracene	ND		1.9	0.14
50-32-8	Benzo[a]pyrene	ND		1.9	0.13
205-99-2	Benzo[b]fluoranthene	ND		1.9	0.15
191-24-2	Benzo[g,h,i]perylene	ND		1.9	0.15
207-08-9	Benzo[k]fluoranthene	ND		1.9	0.53
117-81-7	Bis(2-ethylhexyl) phthalate	ND		19	12
108-60-1	2,2'-oxybis[1-chloropropane]	ND		1.9	0.19
101-55-3	4-Bromophenyl phenyl ether	ND		9.6	0.61
85-68-7	Butyl benzyl phthalate	ND		9.6	1.4
86-74-8	Carbazole	ND		1.9	0.15
106-47-8	4-Chloroaniline	ND		9.6	0.85
91-58-7	2-Chloronaphthalene	ND		1.9	0.15
7005-72-3	4-Chlorophenyl phenyl ether	ND		9.6	0.48
218-01-9	Chrysene	ND		1.9	0.13
53-70-3	Dibenz(a,h)anthracene	ND		1.9	0.15
132-64-9	Dibenzofuran	ND		9.6	0.59
84-74-2	Di-n-butyl phthalate	ND		9.6	1.2
91-94-1	3,3'-Dichlorobenzidine	ND		9.6	1.1
84-66-2	Diethyl phthalate	ND		9.6	1.4
131-11-3	Dimethyl phthalate	ND		9.6	0.74
121-14-2	2,4-Dinitrotoluene	ND		9.6	0.52
606-20-2	2,6-Dinitrotoluene	ND		9.6	0.77
117-84-0	Di-n-octyl phthalate	ND		9.6	2.0
206-44-0	Fluoranthene	0.37	J	1.9	0.16
86-73-7	Fluorene	ND		1.9	0.21
118-74-1	Hexachlorobenzene	ND		1.9	0.18
87-68-3	Hexachlorobutadiene	ND		1.9	0.16
77-47-4	Hexachlorocyclopentadiene	ND		9.6	0.50
67-72-1	Hexachloroethane	ND		9.6	0.60
193-39-5	Indeno[1,2,3-cd]pyrene	ND		1.9	0.19
78-59-1	Isophorone	ND		9.6	0.62

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-03-20131009 | Lab Sample ID: 180-26012-3

Matrix: Water | Lab File ID: N1017011.D

Analysis Method: 8270D | Date Collected: 10/09/2013 14:05

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1040(mL) | Date Analyzed: 10/17/2013 16:23

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
91-57-6	2-Methylnaphthalene	ND		1.9	0.12
91-20-3	Naphthalene	ND		1.9	0.13
88-74-4	2-Nitroaniline	ND		48	3.4
99-09-2	3-Nitroaniline	ND		48	3.1
100-01-6	4-Nitroaniline	ND		48	1.7
100-02-7	4-Nitrophenol	ND		48	6.2
98-95-3	Nitrobenzene	ND		19	0.81
621-64-7	N-Nitrosodi-n-propylamine	ND		1.9	0.30
86-30-6	N-Nitrosodiphenylamine	ND		9.6	0.82
85-01-8	Phenanthrene	ND		1.9	0.41
129-00-0	Pyrene	ND		1.9	0.15
59-50-7	4-Chloro-3-methylphenol	ND		9.6	0.73
95-57-8	2-Chlorophenol	ND		9.6	1.6
95-48-7	2-Methylphenol	ND		9.6	0.83
106-44-5	Methylphenol, 3 & 4	ND		9.6	0.87
120-83-2	2,4-Dichlorophenol	ND		1.9	0.32
105-67-9	2,4-Dimethylphenol	ND		9.6	0.82
51-28-5	2,4-Dinitrophenol	ND		48	5.9
534-52-1	4,6-Dinitro-2-methylphenol	ND		48	2.1
88-75-5	2-Nitrophenol	ND		9.6	1.6
87-86-5	Pentachlorophenol	ND		9.6	0.64
108-95-2	Phenol	ND		1.9	0.56
95-95-4	2,4,5-Trichlorophenol	ND		9.6	1.5
88-06-2	2,4,6-Trichlorophenol	ND		9.6	1.7
98-86-2	Acetophenone	ND		9.6	0.77
1912-24-9	Atrazine	ND		9.6	0.86
100-52-7	Benzaldehyde	ND		9.6	1.4
92-52-4	1,1'-Biphenyl	ND		9.6	0.40
105-60-2	Caprolactam	15	J	48	11
111-91-1	Bis(2-chloroethoxy)methane	ND		9.6	0.56
111-44-4	Bis(2-chloroethyl)ether	ND		1.9	0.24

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-03-20131009 Lab Sample ID: 180-26012-3

Matrix: Water Lab File ID: N1017011.D

Analysis Method: 8270D Date Collected: 10/09/2013 14:05

Extract. Method: 3520C Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1040(mL) Date Analyzed: 10/17/2013 16:23

Con. Extract Vol.: 10.0(mL) Dilution Factor: 1

Injection Volume: 2(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	55		37-104
4165-62-2	Phenol-d5 (Surr)	43		30-102
321-60-8	2-Fluorobiphenyl	57		35-108
118-79-6	2,4,6-Tribromophenol (Surr)	63		33-122
367-12-4	2-Fluorophenol (Surr)	46		26-100
1718-51-0	Terphenyl-d14 (Surr)	36		25-130

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN101713D.b\N1017011.D
Lab Smp Id: 180-26012-C-3-A Client Smp ID: MB-MW-03-20131009
Inj Date : 17-OCT-2013 16:23
Operator : 3200 Inst ID: 733.i
Smp Info : 180-26012-C-3-A
Misc Info : 180-26012-C-3-A
Comment :
Method : \\PITSVR06\D\chem\733.i\TN101713D.b\T8270d.m
Meth Date : 17-Oct-2013 11:57 piccolinov Quant Type: ISTD
Cal Date : 09-OCT-2013 08:22 Cal File: N1009IC8.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: padepi.sub
Target Version: 4.14
Processing Host: PITPC-502

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
* 1	1,4-Dichlorobenzene-d4	152	6.286	6.271	(1.000)	168055	8.00000	
* 2	Naphthalene-d8	136	7.514	7.505	(1.000)	585853	8.00000	
* 3	Acenaphthene-d10	164	9.160	9.156	(1.000)	324663	8.00000	
* 4	Phenanthrene-d10	188	10.543	10.540	(1.000)	513956	8.00000	
* 5	Chrysene-d12	240	14.101	14.113	(1.000)	481143	8.00000	
* 6	Perylene-d12	264	17.039	17.062	(1.000)	388023	8.00000	
198	1,4-Dioxane	88	Compound Not Detected.					
10	N-Nitrosodimethylamine	74	Compound Not Detected.					
9	Pyridine	79	Compound Not Detected.					
16	Methyl methanesulfonate	80	Compound Not Detected.					
206	Benzaldehyde	77	Compound Not Detected.					
21	Aniline	93	Compound Not Detected.					
22	Phenol	94	Compound Not Detected.					
23	bis(2-Chloroethyl)ether	93	Compound Not Detected.					
24	2-Chlorophenol	128	Compound Not Detected.					
26	1,3-Dichlorobenzene	146	Compound Not Detected.					
27	1,4-Dichlorobenzene	146	Compound Not Detected.					
28	1,2-Dichlorobenzene	146	Compound Not Detected.					
217	Indene	116	Compound Not Detected.					
29	Benzyl Alcohol	108	Compound Not Detected.					
30	2-Methylphenol	108	Compound Not Detected.					
31	2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
37	Acetophenone	105	Compound Not Detected.					
32	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
192	4-Methylphenol	108	Compound Not Detected.					
34	Hexachloroethane	117	Compound Not Detected.					
35	Nitrobenzene	77	Compound Not Detected.					
36	N-Nitrosopyrrolidine	100	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
41	Isophorone	82	Compound Not Detected.					
42	2-Nitrophenol	139	Compound Not Detected.					
43	2,4-Dimethylphenol	107	Compound Not Detected.					
44	bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
48	2,4-Dichlorophenol	162	Compound Not Detected.					
49	Benzoic Acid	122	Compound Not Detected.					
50	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
51	Naphthalene	128	Compound Not Detected.					
52	4-Chloroaniline	127	Compound Not Detected.					
54	2,6-Dichlorophenol	162	Compound Not Detected.					
56	Hexachlorobutadiene	224	Compound Not Detected.					
208	Caprolactam	113	7.883	7.863	(1.049)	17503	3.13223	3.1322
59	4-Chloro-3-Methylphenol	107	Compound Not Detected.					
62	2-Methylnaphthalene	142	Compound Not Detected.					
63	1-Methylnaphthalene	142	Compound Not Detected.					
64	Hexachlorocyclopentadiene	236	Compound Not Detected.					
65	1,2,4,5-Tetrachlorobenzene	215	Compound Not Detected.					
66	2,4,6-Trichlorophenol	196	Compound Not Detected.					
67	2,4,5-Trichlorophenol	196	Compound Not Detected.					
209	1,1'-Biphenyl	154	Compound Not Detected.					
70	2-Chloronaphthalene	162	Compound Not Detected.					
73	2-Nitroaniline	65	Compound Not Detected.					
76	Dimethylphthalate	163	Compound Not Detected.					
78	2,6-Dinitrotoluene	165	Compound Not Detected.					
79	Acenaphthylene	152	Compound Not Detected.					
81	3-Nitroaniline	138	Compound Not Detected.					
82	Acenaphthene	153	9.187	9.188	(1.003)	2499	0.05080	0.050801
83	2,4-Dinitrophenol	184	Compound Not Detected.					
85	4-Nitrophenol	109	Compound Not Detected.					
86	Dibenzofuran	168	Compound Not Detected.					
87	2,4-Dinitrotoluene	165	Compound Not Detected.					
91	2,3,5,6-Tetrachlorophenol	231	Compound Not Detected.					
88	2,3,4,6-Tetrachlorophenol	231	Compound Not Detected.					
92	2-Naphthylamine	143	Compound Not Detected.					
93	Diethylphthalate	149	Compound Not Detected.					
94	Fluorene	166	Compound Not Detected.					
95	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
96	4-Nitroaniline	138	Compound Not Detected.					
98	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
99	N-Nitrosodiphenylamine (1)	169	Compound Not Detected.					
100	1,2-Diphenylhydrazine	77	Compound Not Detected.					
106	4-Bromophenyl-phenylether	248	Compound Not Detected.					
107	Hexachlorobenzene	283	Compound Not Detected.					
210	Atrazine	200	Compound Not Detected.					
111	Pentachlorophenol	265	Compound Not Detected.					
115	Phenanthrene	178	Compound Not Detected.					
116	Anthracene	178	Compound Not Detected.					
119	Carbazole	167	Compound Not Detected.					
120	Di-n-Butylphthalate	149	Compound Not Detected.					
123	Fluoranthene	202	11.874	11.875	(1.126)	6144	0.07685	0.076854(H)
124	Benzidine	184	Compound Not Detected.					
125	Pyrene	202	Compound Not Detected.					
131	Butylbenzylphthalate	149	Compound Not Detected.					
135	3,3'-Dichlorobenzidine	252	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
136 Benzo(a)Anthracene	228	Compound Not Detected.					
137 Chrysene	228	Compound Not Detected.					
139 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.					
140 Di-n-octylphthalate	149	Compound Not Detected.					
141 Benzo(b)fluoranthene	252	Compound Not Detected.					
142 Benzo(k)fluoranthene	252	Compound Not Detected.					
143 7,12-dimethylbenz[a]anthracen	256	Compound Not Detected.					
146 Benzo(a)pyrene	252	Compound Not Detected.					
149 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
150 Dibenz(a,h)anthracene	278	Compound Not Detected.					
151 Benzo(g,h,i)perylene	276	Compound Not Detected.					
$ 154 Nitrobenzene-d5	82	6.820	6.811	(0.908)	578220	22.0401	22.040
$ 155 2-Fluorobiphenyl	172	8.513	8.510	(0.929)	1377505	22.8807	22.881
$ 156 Terphenyl-d14	244	12.333	12.340	(0.875)	819812	14.3996	14.400
$ 157 Phenol-d5	99	5.933	5.913	(0.944)	524631	17.0750	17.075
$ 158 2-Fluorophenol	112	4.918	4.888	(0.782)	483713	18.4971	18.497
$ 159 2,4,6-Tribromophenol	330	9.892	9.888	(0.938)	141211	25.0023	25.002

QC Flag Legend

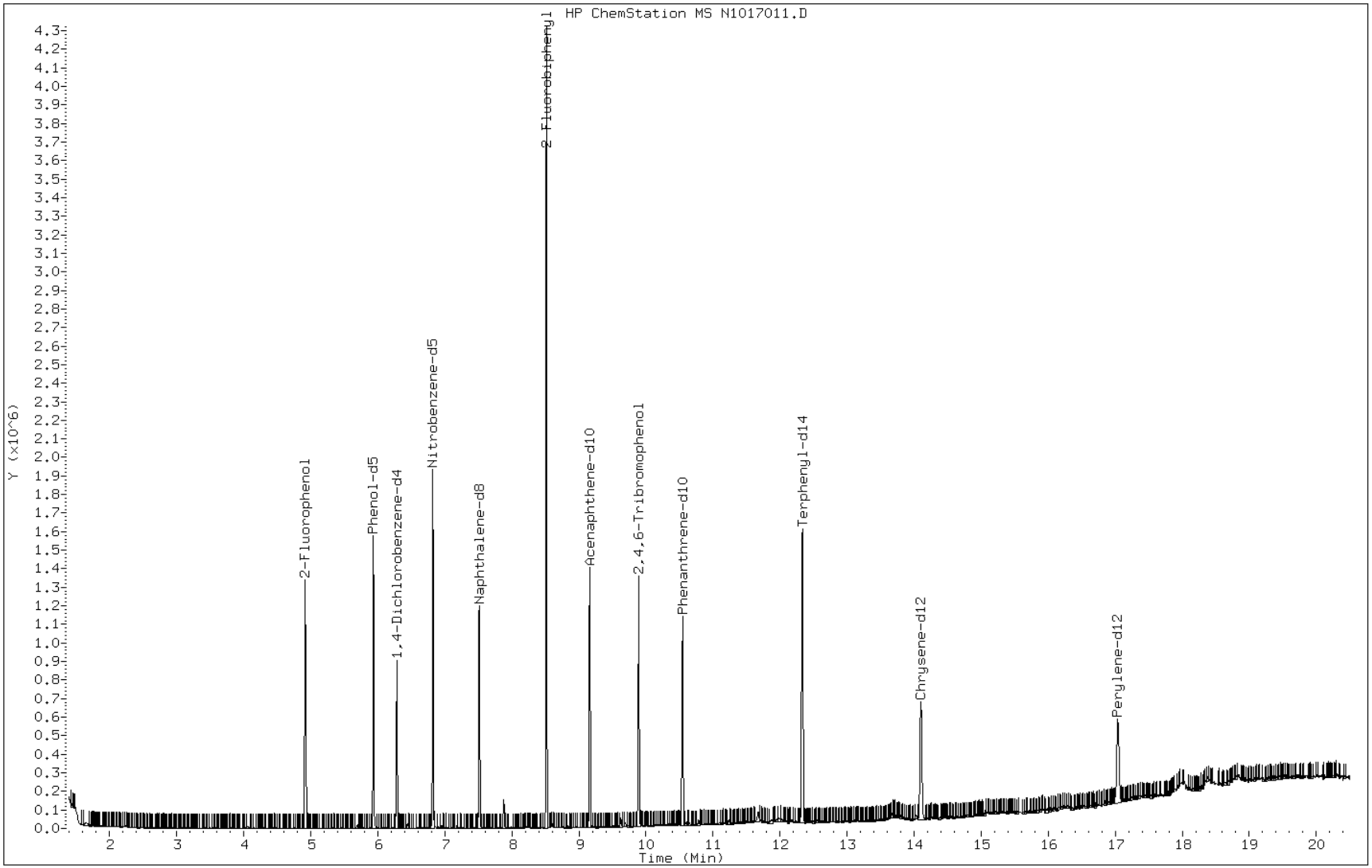
H - Operator selected an alternate compound hit.

Data File: N1017011.D

Date: 17-OCT-2013 16:23

Client ID: MB-MW-03-20131009 Instrument: 733.i

Sample Info: 180-26012-C-3-A Operator: 3200



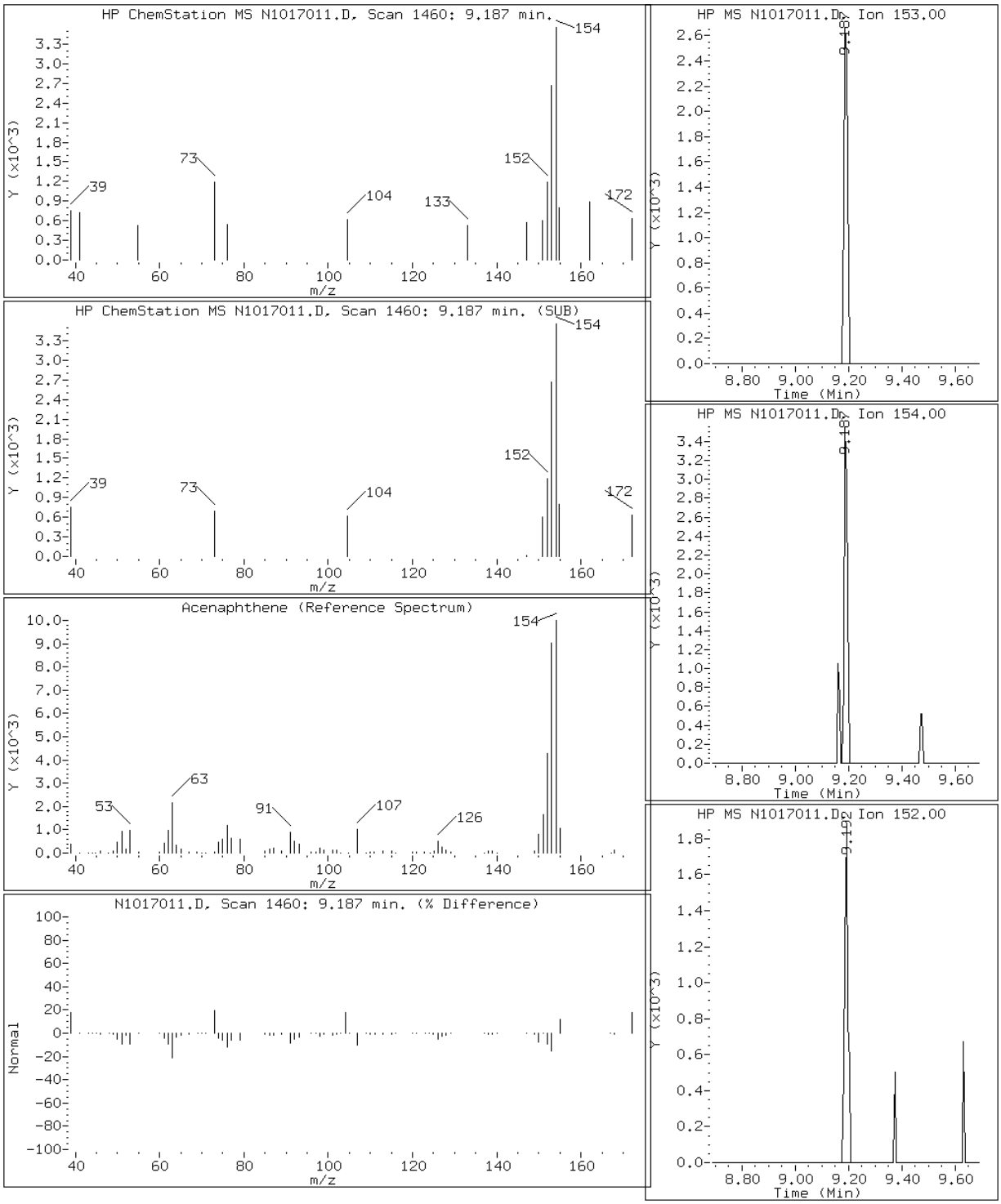
Data File: N1017011.D

Date: 17-OCT-2013 16:23

Client ID: MB-MW-03-20131009 Instrument: 733.i

Sample Info: 180-26012-C-3-A Operator: 3200

82 Acenaphthene



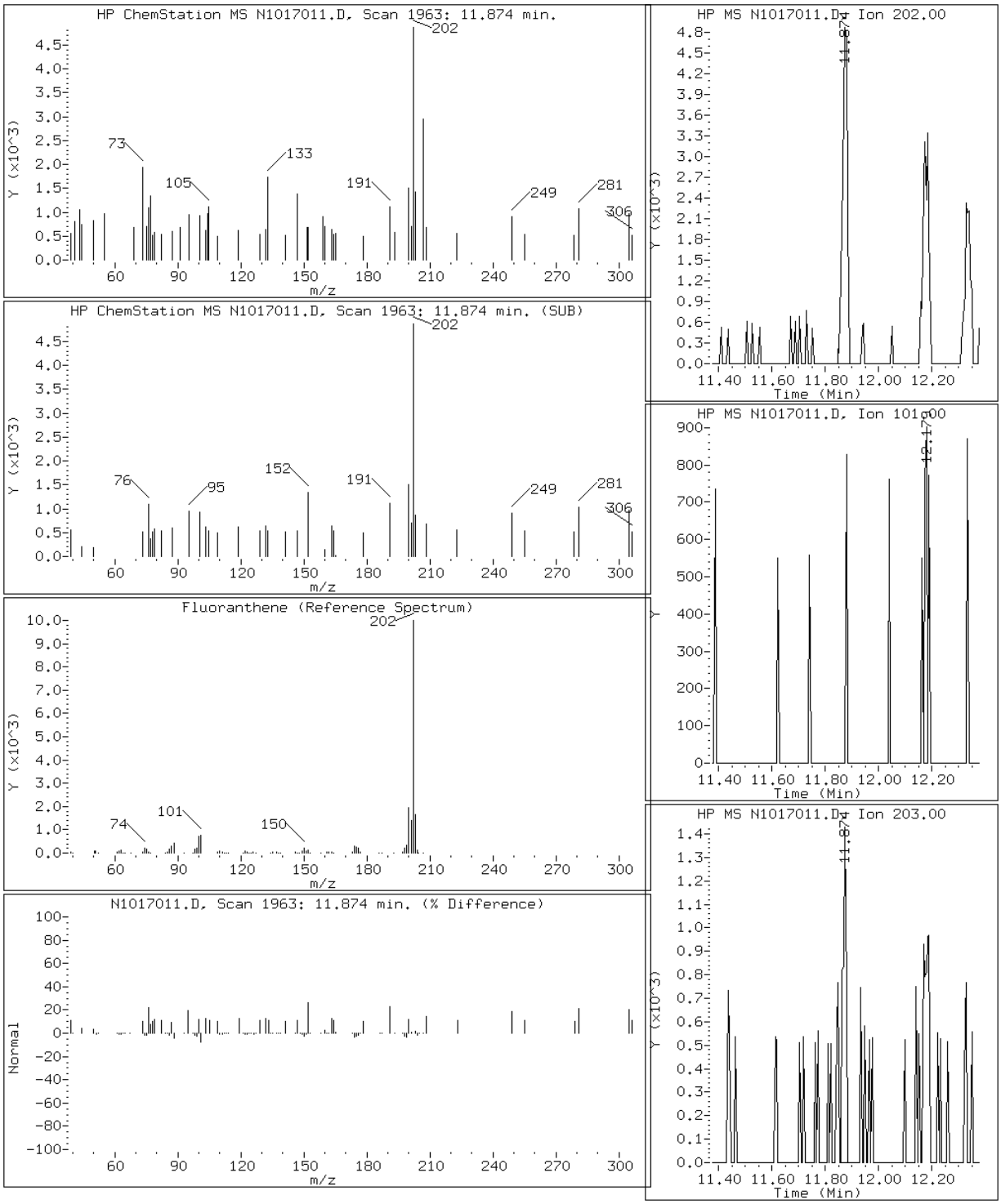
Data File: N1017011.D

Date: 17-OCT-2013 16:23

Client ID: MB-MW-03-20131009 Instrument: 733.i

Sample Info: 180-26012-C-3-A Operator: 3200

123 Fluoranthene



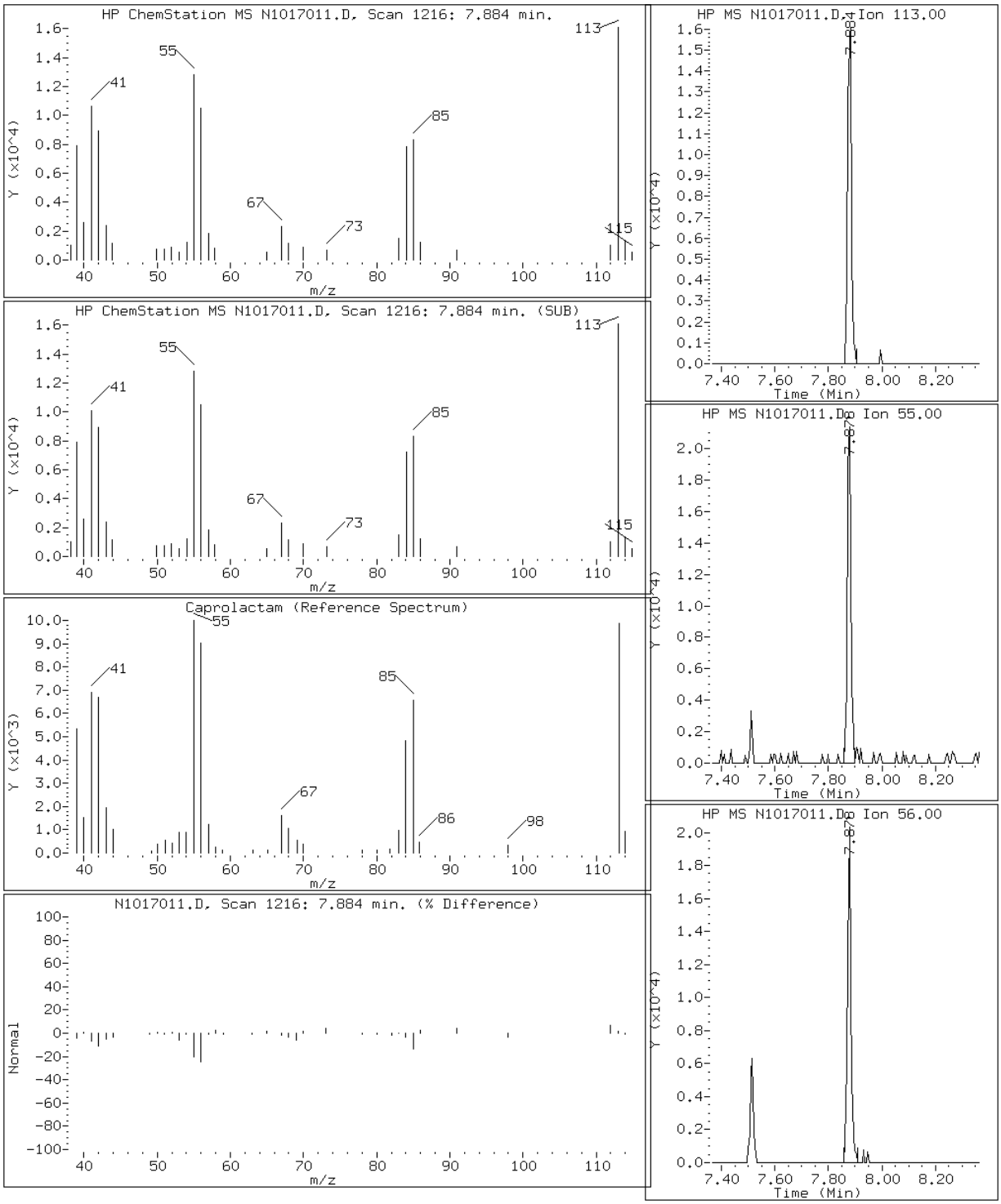
Data File: N1017011.D

Date: 17-OCT-2013 16:23

Client ID: MB-MW-03-20131009 Instrument: 733.i

Sample Info: 180-26012-C-3-A Operator: 3200

208 Caprolactam



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-EB-20131009 | Lab Sample ID: 180-26012-4

Matrix: Water | Lab File ID: N1017012.D

Analysis Method: 8270D | Date Collected: 10/09/2013 15:30

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1050(mL) | Date Analyzed: 10/17/2013 16:49

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND		1.9	0.14
208-96-8	Acenaphthylene	ND		1.9	0.14
120-12-7	Anthracene	ND		1.9	0.15
56-55-3	Benzo[a]anthracene	ND		1.9	0.14
50-32-8	Benzo[a]pyrene	ND		1.9	0.13
205-99-2	Benzo[b]fluoranthene	ND		1.9	0.15
191-24-2	Benzo[g,h,i]perylene	ND		1.9	0.14
207-08-9	Benzo[k]fluoranthene	ND		1.9	0.52
117-81-7	Bis(2-ethylhexyl) phthalate	ND		19	12
108-60-1	2,2'-oxybis[1-chloropropane]	ND		1.9	0.19
101-55-3	4-Bromophenyl phenyl ether	ND		9.5	0.60
85-68-7	Butyl benzyl phthalate	ND		9.5	1.4
86-74-8	Carbazole	ND		1.9	0.15
106-47-8	4-Chloroaniline	ND		9.5	0.84
91-58-7	2-Chloronaphthalene	ND		1.9	0.14
7005-72-3	4-Chlorophenyl phenyl ether	ND		9.5	0.48
218-01-9	Chrysene	ND		1.9	0.13
53-70-3	Dibenz(a,h)anthracene	ND		1.9	0.15
132-64-9	Dibenzofuran	ND		9.5	0.59
84-74-2	Di-n-butyl phthalate	ND		9.5	1.2
91-94-1	3,3'-Dichlorobenzidine	ND		9.5	1.1
84-66-2	Diethyl phthalate	ND		9.5	1.4
131-11-3	Dimethyl phthalate	ND		9.5	0.73
121-14-2	2,4-Dinitrotoluene	ND		9.5	0.51
606-20-2	2,6-Dinitrotoluene	ND		9.5	0.76
117-84-0	Di-n-octyl phthalate	ND		9.5	2.0
206-44-0	Fluoranthene	ND		1.9	0.15
86-73-7	Fluorene	ND		1.9	0.21
118-74-1	Hexachlorobenzene	ND		1.9	0.17
87-68-3	Hexachlorobutadiene	ND		1.9	0.16
77-47-4	Hexachlorocyclopentadiene	ND		9.5	0.49
67-72-1	Hexachloroethane	ND		9.5	0.60
193-39-5	Indeno[1,2,3-cd]pyrene	ND		1.9	0.19
78-59-1	Isophorone	ND		9.5	0.61

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-EB-20131009 | Lab Sample ID: 180-26012-4

Matrix: Water | Lab File ID: N1017012.D

Analysis Method: 8270D | Date Collected: 10/09/2013 15:30

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1050(mL) | Date Analyzed: 10/17/2013 16:49

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
91-57-6	2-Methylnaphthalene	ND		1.9	0.12
91-20-3	Naphthalene	ND		1.9	0.13
88-74-4	2-Nitroaniline	ND		48	3.3
99-09-2	3-Nitroaniline	ND		48	3.1
100-01-6	4-Nitroaniline	ND		48	1.6
100-02-7	4-Nitrophenol	ND		48	6.2
98-95-3	Nitrobenzene	ND		19	0.80
621-64-7	N-Nitrosodi-n-propylamine	ND		1.9	0.29
86-30-6	N-Nitrosodiphenylamine	ND		9.5	0.81
85-01-8	Phenanthrene	ND		1.9	0.41
129-00-0	Pyrene	ND		1.9	0.15
59-50-7	4-Chloro-3-methylphenol	ND		9.5	0.72
95-57-8	2-Chlorophenol	ND		9.5	1.6
95-48-7	2-Methylphenol	ND		9.5	0.82
106-44-5	Methylphenol, 3 & 4	ND		9.5	0.86
120-83-2	2,4-Dichlorophenol	ND		1.9	0.32
105-67-9	2,4-Dimethylphenol	ND		9.5	0.81
51-28-5	2,4-Dinitrophenol	ND		48	5.8
534-52-1	4,6-Dinitro-2-methylphenol	ND		48	2.1
88-75-5	2-Nitrophenol	ND		9.5	1.6
87-86-5	Pentachlorophenol	ND		9.5	0.63
108-95-2	Phenol	ND		1.9	0.55
95-95-4	2,4,5-Trichlorophenol	ND		9.5	1.5
88-06-2	2,4,6-Trichlorophenol	ND		9.5	1.7
98-86-2	Acetophenone	ND		9.5	0.76
1912-24-9	Atrazine	ND		9.5	0.85
100-52-7	Benzaldehyde	ND		9.5	1.4
92-52-4	1,1'-Biphenyl	ND		9.5	0.40
105-60-2	Caprolactam	ND		48	11
111-91-1	Bis(2-chloroethoxy)methane	ND		9.5	0.55
111-44-4	Bis(2-chloroethyl)ether	ND		1.9	0.24

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-EB-20131009 Lab Sample ID: 180-26012-4

Matrix: Water Lab File ID: N1017012.D

Analysis Method: 8270D Date Collected: 10/09/2013 15:30

Extract. Method: 3520C Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1050(mL) Date Analyzed: 10/17/2013 16:49

Con. Extract Vol.: 10.0(mL) Dilution Factor: 1

Injection Volume: 2(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	55		37-104
4165-62-2	Phenol-d5 (Surr)	47		30-102
321-60-8	2-Fluorobiphenyl	57		35-108
118-79-6	2,4,6-Tribromophenol (Surr)	61		33-122
367-12-4	2-Fluorophenol (Surr)	49		26-100
1718-51-0	Terphenyl-d14 (Surr)	65		25-130

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN101713D.b\N1017012.D
Lab Smp Id: 180-26012-A-4-A Client Smp ID: MB-EB-20131009
Inj Date : 17-OCT-2013 16:49
Operator : 3200 Inst ID: 733.i
Smp Info : 180-26012-A-4-A
Misc Info : 180-26012-A-4-A
Comment :
Method : \\PITSVR06\D\chem\733.i\TN101713D.b\T8270d.m
Meth Date : 17-Oct-2013 11:57 piccolinov Quant Type: ISTD
Cal Date : 09-OCT-2013 08:22 Cal File: N1009IC8.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: padepi.sub
Target Version: 4.14
Processing Host: PITPC-502

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
* 1	1,4-Dichlorobenzene-d4	152	6.270	6.271	(1.000)	169486	8.00000	
* 2	Naphthalene-d8	136	7.499	7.505	(1.000)	610405	8.00000	
* 3	Acenaphthene-d10	164	9.149	9.156	(1.000)	347050	8.00000	
* 4	Phenanthrene-d10	188	10.528	10.540	(1.000)	584615	8.00000	
* 5	Chrysene-d12	240	14.075	14.113	(1.000)	529593	8.00000	
* 6	Perylene-d12	264	17.008	17.062	(1.000)	408311	8.00000	
198	1,4-Dioxane	88	Compound Not Detected.					
10	N-Nitrosodimethylamine	74	Compound Not Detected.					
9	Pyridine	79	Compound Not Detected.					
16	Methyl methanesulfonate	80	Compound Not Detected.					
206	Benzaldehyde	77	Compound Not Detected.					
21	Aniline	93	Compound Not Detected.					
22	Phenol	94	Compound Not Detected.					
23	bis(2-Chloroethyl)ether	93	Compound Not Detected.					
24	2-Chlorophenol	128	Compound Not Detected.					
26	1,3-Dichlorobenzene	146	Compound Not Detected.					
27	1,4-Dichlorobenzene	146	Compound Not Detected.					
28	1,2-Dichlorobenzene	146	Compound Not Detected.					
217	Indene	116	Compound Not Detected.					
29	Benzyl Alcohol	108	Compound Not Detected.					
30	2-Methylphenol	108	Compound Not Detected.					
31	2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
37	Acetophenone	105	Compound Not Detected.					
32	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
192	4-Methylphenol	108	Compound Not Detected.					
34	Hexachloroethane	117	Compound Not Detected.					
35	Nitrobenzene	77	Compound Not Detected.					
36	N-Nitrosopyrrolidine	100	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ng)
41 Isophorone	82	Compound Not Detected.					
42 2-Nitrophenol	139	Compound Not Detected.					
43 2,4-Dimethylphenol	107	Compound Not Detected.					
44 bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
48 2,4-Dichlorophenol	162	Compound Not Detected.					
49 Benzoic Acid	122	Compound Not Detected.					
50 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
51 Naphthalene	128	Compound Not Detected.					
52 4-Chloroaniline	127	Compound Not Detected.					
54 2,6-Dichlorophenol	162	Compound Not Detected.					
56 Hexachlorobutadiene	224	Compound Not Detected.					
208 Caprolactam	113	Compound Not Detected.					
59 4-Chloro-3-Methylphenol	107	Compound Not Detected.					
62 2-Methylnaphthalene	142	Compound Not Detected.					
63 1-Methylnaphthalene	142	Compound Not Detected.					
64 Hexachlorocyclopentadiene	236	Compound Not Detected.					
65 1,2,4,5-Tetrachlorobenzene	215	Compound Not Detected.					
66 2,4,6-Trichlorophenol	196	Compound Not Detected.					
67 2,4,5-Trichlorophenol	196	Compound Not Detected.					
209 1,1'-Biphenyl	154	Compound Not Detected.					
70 2-Chloronaphthalene	162	Compound Not Detected.					
73 2-Nitroaniline	65	Compound Not Detected.					
76 Dimethylphthalate	163	Compound Not Detected.					
78 2,6-Dinitrotoluene	165	Compound Not Detected.					
79 Acenaphthylene	152	Compound Not Detected.					
81 3-Nitroaniline	138	Compound Not Detected.					
82 Acenaphthene	153	Compound Not Detected.					
83 2,4-Dinitrophenol	184	Compound Not Detected.					
85 4-Nitrophenol	109	Compound Not Detected.					
86 Dibenzofuran	168	Compound Not Detected.					
87 2,4-Dinitrotoluene	165	Compound Not Detected.					
91 2,3,5,6-Tetrachlorophenol	231	Compound Not Detected.					
88 2,3,4,6-Tetrachlorophenol	231	Compound Not Detected.					
92 2-Naphthylamine	143	Compound Not Detected.					
93 Diethylphthalate	149	Compound Not Detected.					
94 Fluorene	166	Compound Not Detected.					
95 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
96 4-Nitroaniline	138	Compound Not Detected.					
98 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
99 N-Nitrosodiphenylamine (1)	169	Compound Not Detected.					
100 1,2-Diphenylhydrazine	77	Compound Not Detected.					
106 4-Bromophenyl-phenylether	248	Compound Not Detected.					
107 Hexachlorobenzene	283	Compound Not Detected.					
210 Atrazine	200	Compound Not Detected.					
111 Pentachlorophenol	265	Compound Not Detected.					
115 Phenanthrene	178	Compound Not Detected.					
116 Anthracene	178	Compound Not Detected.					
119 Carbazole	167	Compound Not Detected.					
120 Di-n-Butylphthalate	149	Compound Not Detected.					
123 Fluoranthene	202	Compound Not Detected.					
124 Benzidine	184	Compound Not Detected.					
125 Pyrene	202	Compound Not Detected.					
131 Butylbenzylphthalate	149	Compound Not Detected.					
135 3,3'-Dichlorobenzidine	252	Compound Not Detected.					

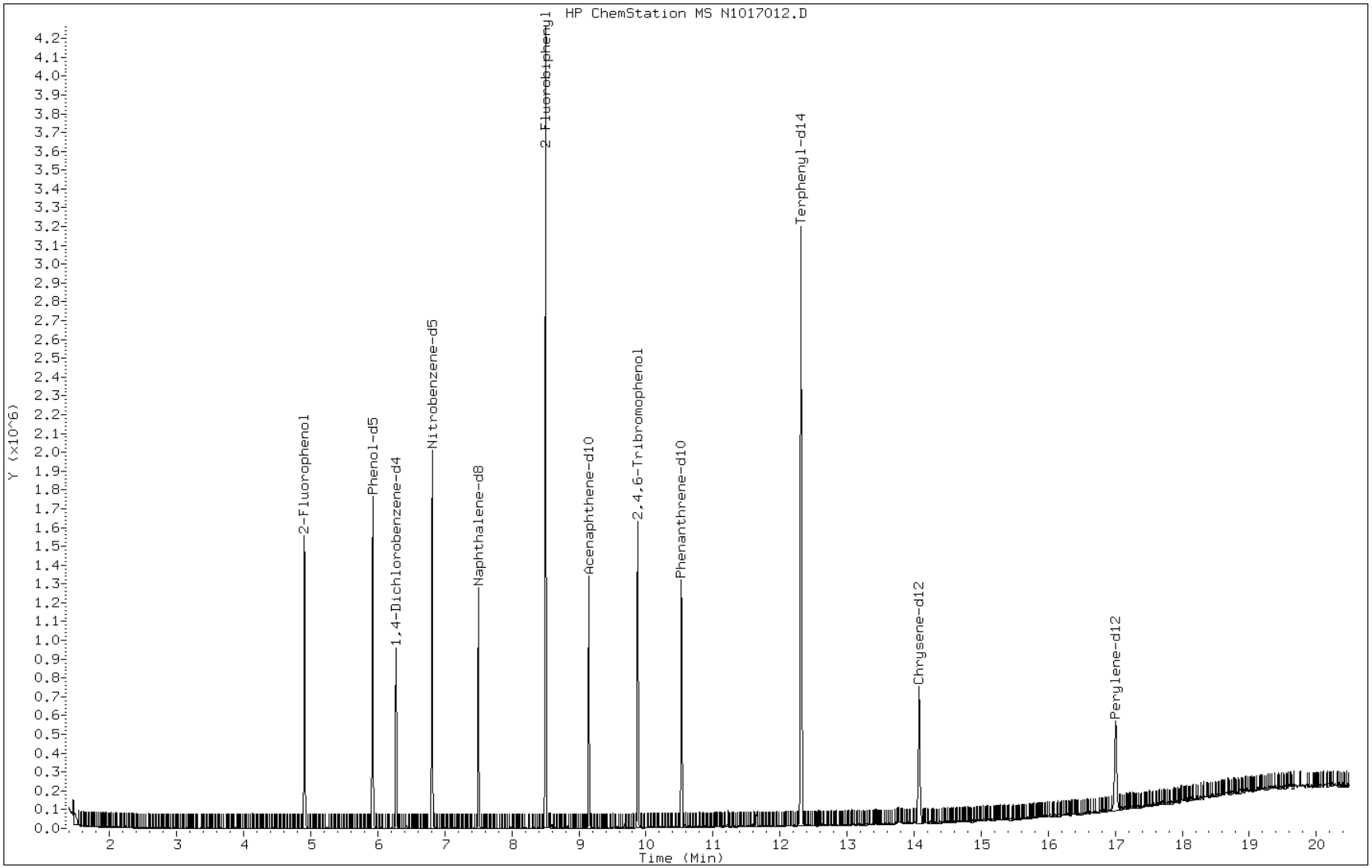
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
136 Benzo(a)Anthracene	228	Compound Not Detected.					
137 Chrysene	228	Compound Not Detected.					
139 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.					
140 Di-n-octylphthalate	149	Compound Not Detected.					
141 Benzo(b)fluoranthene	252	Compound Not Detected.					
142 Benzo(k)fluoranthene	252	Compound Not Detected.					
143 7,12-dimethylbenz[a]anthracen	256	Compound Not Detected.					
146 Benzo(a)pyrene	252	Compound Not Detected.					
149 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
150 Dibenz(a,h)anthracene	278	Compound Not Detected.					
151 Benzo(g,h,i)perylene	276	Compound Not Detected.					
$ 154 Nitrobenzene-d5	82	6.810	6.811	(0.908)	597052	21.8425	21.842
$ 155 2-Fluorobiphenyl	172	8.503	8.510	(0.929)	1457408	22.6464	22.646
$ 156 Terphenyl-d14	244	12.312	12.340	(0.875)	1636871	26.1206	26.121
$ 157 Phenol-d5	99	5.923	5.913	(0.945)	585842	18.9062	18.906
$ 158 2-Fluorophenol	112	4.902	4.888	(0.782)	516029	19.5663	19.566
$ 159 2,4,6-Tribromophenol	330	9.876	9.888	(0.938)	156705	24.3921	24.392

Data File: N1017012.D

Date: 17-OCT-2013 16:49

Client ID: MB-EB-20131009 Instrument: 733.i

Sample Info: 180-26012-A-4-A Operator: 3200



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-04-20131009 | Lab Sample ID: 180-26012-5

Matrix: Water | Lab File ID: N1017013.D

Analysis Method: 8270D | Date Collected: 10/09/2013 10:52

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1040(mL) | Date Analyzed: 10/17/2013 17:15

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	1.3	J	1.9	0.14
208-96-8	Acenaphthylene	ND		1.9	0.15
120-12-7	Anthracene	0.35	J	1.9	0.15
56-55-3	Benzo[a]anthracene	ND		1.9	0.14
50-32-8	Benzo[a]pyrene	ND		1.9	0.13
205-99-2	Benzo[b]fluoranthene	ND		1.9	0.15
191-24-2	Benzo[g,h,i]perylene	ND		1.9	0.15
207-08-9	Benzo[k]fluoranthene	ND		1.9	0.53
117-81-7	Bis(2-ethylhexyl) phthalate	ND		19	12
108-60-1	2,2'-oxybis[1-chloropropane]	ND		1.9	0.19
101-55-3	4-Bromophenyl phenyl ether	ND		9.6	0.61
85-68-7	Butyl benzyl phthalate	ND		9.6	1.4
86-74-8	Carbazole	ND		1.9	0.15
106-47-8	4-Chloroaniline	ND		9.6	0.85
91-58-7	2-Chloronaphthalene	ND		1.9	0.15
7005-72-3	4-Chlorophenyl phenyl ether	ND		9.6	0.48
218-01-9	Chrysene	ND		1.9	0.13
53-70-3	Dibenz(a,h)anthracene	ND		1.9	0.15
132-64-9	Dibenzofuran	ND		9.6	0.59
84-74-2	Di-n-butyl phthalate	ND		9.6	1.2
91-94-1	3,3'-Dichlorobenzidine	ND		9.6	1.1
84-66-2	Diethyl phthalate	ND		9.6	1.4
131-11-3	Dimethyl phthalate	ND		9.6	0.74
121-14-2	2,4-Dinitrotoluene	ND		9.6	0.52
606-20-2	2,6-Dinitrotoluene	ND		9.6	0.77
117-84-0	Di-n-octyl phthalate	ND		9.6	2.0
206-44-0	Fluoranthene	ND		1.9	0.16
86-73-7	Fluorene	0.56	J	1.9	0.21
118-74-1	Hexachlorobenzene	ND		1.9	0.18
87-68-3	Hexachlorobutadiene	ND		1.9	0.16
77-47-4	Hexachlorocyclopentadiene	ND		9.6	0.50
67-72-1	Hexachloroethane	ND		9.6	0.60
193-39-5	Indeno[1,2,3-cd]pyrene	ND		1.9	0.19
78-59-1	Isophorone	ND		9.6	0.62

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-04-20131009 | Lab Sample ID: 180-26012-5

Matrix: Water | Lab File ID: N1017013.D

Analysis Method: 8270D | Date Collected: 10/09/2013 10:52

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1040(mL) | Date Analyzed: 10/17/2013 17:15

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
91-57-6	2-Methylnaphthalene	ND		1.9	0.12
91-20-3	Naphthalene	ND		1.9	0.13
88-74-4	2-Nitroaniline	ND		48	3.4
99-09-2	3-Nitroaniline	ND		48	3.1
100-01-6	4-Nitroaniline	ND		48	1.7
100-02-7	4-Nitrophenol	ND		48	6.2
98-95-3	Nitrobenzene	ND		19	0.81
621-64-7	N-Nitrosodi-n-propylamine	ND		1.9	0.30
86-30-6	N-Nitrosodiphenylamine	ND		9.6	0.82
85-01-8	Phenanthrene	ND		1.9	0.41
129-00-0	Pyrene	ND		1.9	0.15
59-50-7	4-Chloro-3-methylphenol	ND		9.6	0.73
95-57-8	2-Chlorophenol	ND		9.6	1.6
95-48-7	2-Methylphenol	ND		9.6	0.83
106-44-5	Methylphenol, 3 & 4	ND		9.6	0.87
120-83-2	2,4-Dichlorophenol	ND		1.9	0.32
105-67-9	2,4-Dimethylphenol	ND		9.6	0.82
51-28-5	2,4-Dinitrophenol	ND		48	5.9
534-52-1	4,6-Dinitro-2-methylphenol	ND		48	2.1
88-75-5	2-Nitrophenol	ND		9.6	1.6
87-86-5	Pentachlorophenol	ND		9.6	0.64
108-95-2	Phenol	ND		1.9	0.56
95-95-4	2,4,5-Trichlorophenol	ND		9.6	1.5
88-06-2	2,4,6-Trichlorophenol	ND		9.6	1.7
98-86-2	Acetophenone	ND		9.6	0.77
1912-24-9	Atrazine	ND		9.6	0.86
100-52-7	Benzaldehyde	ND		9.6	1.4
92-52-4	1,1'-Biphenyl	ND		9.6	0.40
105-60-2	Caprolactam	ND		48	11
111-91-1	Bis(2-chloroethoxy)methane	ND		9.6	0.56
111-44-4	Bis(2-chloroethyl)ether	ND		1.9	0.24

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-04-20131009 Lab Sample ID: 180-26012-5

Matrix: Water Lab File ID: N1017013.D

Analysis Method: 8270D Date Collected: 10/09/2013 10:52

Extract. Method: 3520C Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1040(mL) Date Analyzed: 10/17/2013 17:15

Con. Extract Vol.: 10.0(mL) Dilution Factor: 1

Injection Volume: 2(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	54		37-104
4165-62-2	Phenol-d5 (Surr)	43		30-102
321-60-8	2-Fluorobiphenyl	59		35-108
118-79-6	2,4,6-Tribromophenol (Surr)	71		33-122
367-12-4	2-Fluorophenol (Surr)	46		26-100
1718-51-0	Terphenyl-d14 (Surr)	36		25-130

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN101713D.b\N1017013.D
Lab Smp Id: 180-26012-B-5-A Client Smp ID: MB-MW-04-20131009
Inj Date : 17-OCT-2013 17:15
Operator : 3200 Inst ID: 733.i
Smp Info : 180-26012-B-5-A
Misc Info : 180-26012-B-5-A
Comment :
Method : \\PITSVR06\D\chem\733.i\TN101713D.b\T8270d.m
Meth Date : 17-Oct-2013 11:57 piccolinov Quant Type: ISTD
Cal Date : 09-OCT-2013 08:22 Cal File: N1009IC8.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: padepi.sub
Target Version: 4.14
Processing Host: PITPC-502

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
* 1	1,4-Dichlorobenzene-d4	152	6.283	6.271	(1.000)	141774	8.00000	
* 2	Naphthalene-d8	136	7.512	7.505	(1.000)	447415	8.00000	
* 3	Acenaphthene-d10	164	9.158	9.156	(1.000)	235937	8.00000	
* 4	Phenanthrene-d10	188	10.541	10.540	(1.000)	372490	8.00000	
* 5	Chrysene-d12	240	14.094	14.113	(1.000)	406709	8.00000	
* 6	Perylene-d12	264	17.037	17.062	(1.000)	367737	8.00000	
198	1,4-Dioxane	88	Compound Not Detected.					
10	N-Nitrosodimethylamine	74	Compound Not Detected.					
9	Pyridine	79	Compound Not Detected.					
16	Methyl methanesulfonate	80	Compound Not Detected.					
206	Benzaldehyde	77	Compound Not Detected.					
21	Aniline	93	Compound Not Detected.					
22	Phenol	94	Compound Not Detected.					
23	bis(2-Chloroethyl)ether	93	Compound Not Detected.					
24	2-Chlorophenol	128	Compound Not Detected.					
26	1,3-Dichlorobenzene	146	Compound Not Detected.					
27	1,4-Dichlorobenzene	146	Compound Not Detected.					
28	1,2-Dichlorobenzene	146	Compound Not Detected.					
217	Indene	116	Compound Not Detected.					
29	Benzyl Alcohol	108	Compound Not Detected.					
30	2-Methylphenol	108	Compound Not Detected.					
31	2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
37	Acetophenone	105	Compound Not Detected.					
32	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
192	4-Methylphenol	108	Compound Not Detected.					
34	Hexachloroethane	117	Compound Not Detected.					
35	Nitrobenzene	77	Compound Not Detected.					
36	N-Nitrosopyrrolidine	100	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
41 Isophorone	82	Compound Not Detected.					
42 2-Nitrophenol	139	Compound Not Detected.					
43 2,4-Dimethylphenol	107	Compound Not Detected.					
44 bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
48 2,4-Dichlorophenol	162	Compound Not Detected.					
49 Benzoic Acid	122	Compound Not Detected.					
50 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
51 Naphthalene	128	Compound Not Detected.					
52 4-Chloroaniline	127	Compound Not Detected.					
54 2,6-Dichlorophenol	162	Compound Not Detected.					
56 Hexachlorobutadiene	224	Compound Not Detected.					
208 Caprolactam	113	Compound Not Detected.					
59 4-Chloro-3-Methylphenol	107	Compound Not Detected.					
62 2-Methylnaphthalene	142	Compound Not Detected.					
63 1-Methylnaphthalene	142	Compound Not Detected.					
64 Hexachlorocyclopentadiene	236	Compound Not Detected.					
65 1,2,4,5-Tetrachlorobenzene	215	Compound Not Detected.					
66 2,4,6-Trichlorophenol	196	Compound Not Detected.					
67 2,4,5-Trichlorophenol	196	Compound Not Detected.					
209 1,1'-Biphenyl	154	Compound Not Detected.					
70 2-Chloronaphthalene	162	Compound Not Detected.					
73 2-Nitroaniline	65	Compound Not Detected.					
76 Dimethylphthalate	163	Compound Not Detected.					
78 2,6-Dinitrotoluene	165	Compound Not Detected.					
79 Acenaphthylene	152	Compound Not Detected.					
81 3-Nitroaniline	138	Compound Not Detected.					
82 Acenaphthene	153	9.190	9.188	(1.003)	10002	0.27979	0.27979
83 2,4-Dinitrophenol	184	Compound Not Detected.					
85 4-Nitrophenol	109	Compound Not Detected.					
86 Dibenzofuran	168	Compound Not Detected.					
87 2,4-Dinitrotoluene	165	Compound Not Detected.					
91 2,3,5,6-Tetrachlorophenol	231	Compound Not Detected.					
88 2,3,4,6-Tetrachlorophenol	231	Compound Not Detected.					
92 2-Naphthylamine	143	Compound Not Detected.					
93 Diethylphthalate	149	Compound Not Detected.					
94 Fluorene	166	9.665	9.663	(1.055)	4548	0.11576	0.11576
95 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
96 4-Nitroaniline	138	Compound Not Detected.					
98 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
99 N-Nitrosodiphenylamine (1)	169	Compound Not Detected.					
100 1,2-Diphenylhydrazine	77	Compound Not Detected.					
106 4-Bromophenyl-phenylether	248	Compound Not Detected.					
107 Hexachlorobenzene	283	Compound Not Detected.					
210 Atrazine	200	Compound Not Detected.					
111 Pentachlorophenol	265	Compound Not Detected.					
115 Phenanthrene	178	Compound Not Detected.					
116 Anthracene	178	10.616	10.614	(1.007)	3800	0.07350	0.073499
119 Carbazole	167	Compound Not Detected.					
120 Di-n-Butylphthalate	149	Compound Not Detected.					
123 Fluoranthene	202	Compound Not Detected.					
124 Benzidine	184	Compound Not Detected.					
125 Pyrene	202	Compound Not Detected.					
131 Butylbenzylphthalate	149	Compound Not Detected.					
135 3,3'-Dichlorobenzidine	252	Compound Not Detected.					

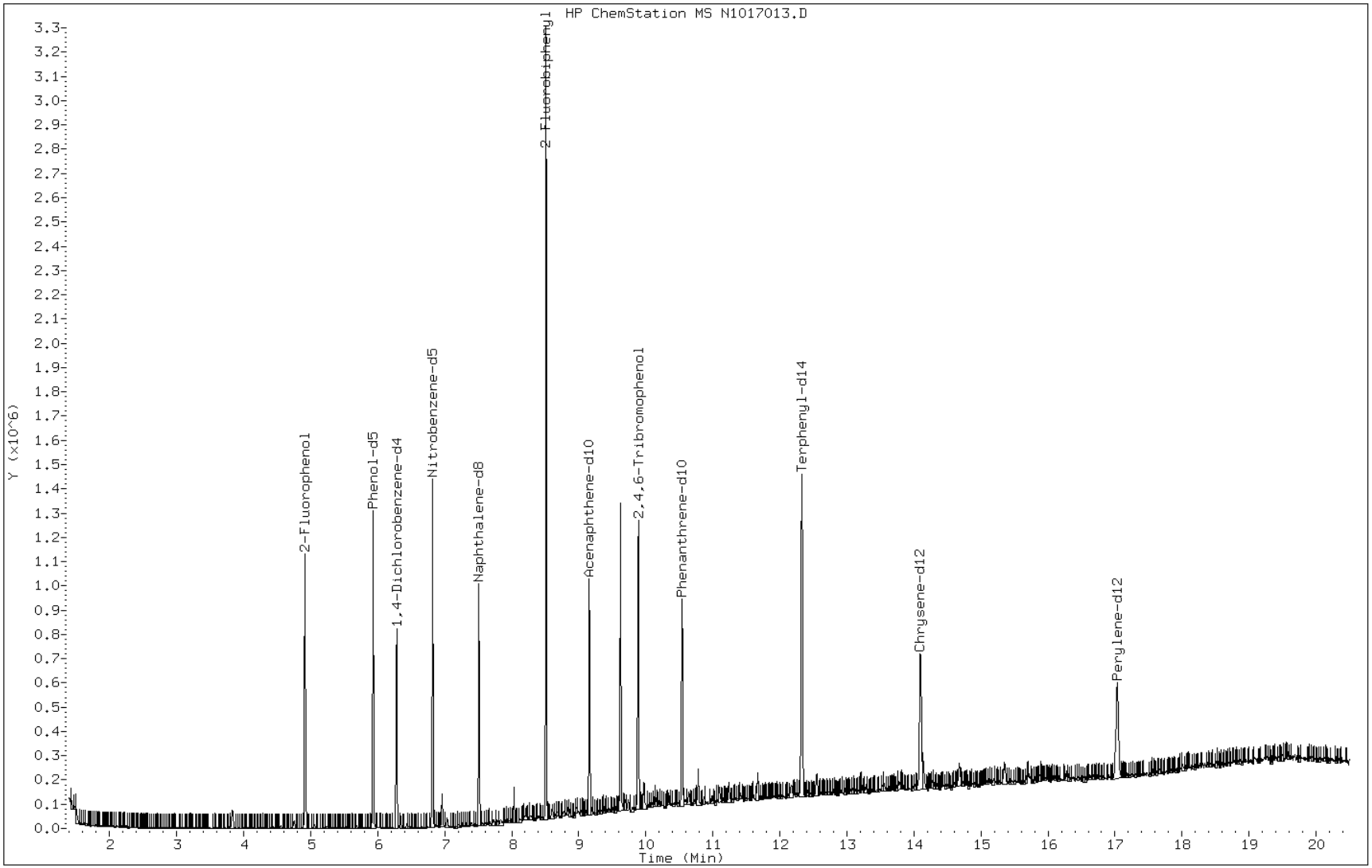
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ng)
136 Benzo(a)Anthracene	228	Compound Not Detected.					
137 Chrysene	228	Compound Not Detected.					
139 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.					
140 Di-n-octylphthalate	149	Compound Not Detected.					
141 Benzo(b)fluoranthene	252	Compound Not Detected.					
142 Benzo(k)fluoranthene	252	Compound Not Detected.					
143 7,12-dimethylbenz[a]anthracen	256	Compound Not Detected.					
146 Benzo(a)pyrene	252	Compound Not Detected.					
149 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
150 Dibenz(a,h)anthracene	278	Compound Not Detected.					
151 Benzo(g,h,i)perylene	276	Compound Not Detected.					
$ 154 Nitrobenzene-d5	82	6.818	6.811	(0.908)	433088	21.6160	21.616
$ 155 2-Fluorobiphenyl	172	8.511	8.510	(0.929)	1025072	23.4297	23.430
$ 156 Terphenyl-d14	244	12.325	12.340	(0.875)	685597	14.2461	14.246
$ 157 Phenol-d5	99	5.931	5.913	(0.944)	442345	17.0656	17.066
$ 158 2-Fluorophenol	112	4.916	4.888	(0.782)	402272	18.2344	18.234
$ 159 2,4,6-Tribromophenol	330	9.889	9.888	(0.938)	116431	28.4440	28.444

Data File: N1017013.D

Date: 17-OCT-2013 17:15

Client ID: MB-MW-04-20131009 Instrument: 733.i

Sample Info: 180-26012-B-5-A Operator: 3200



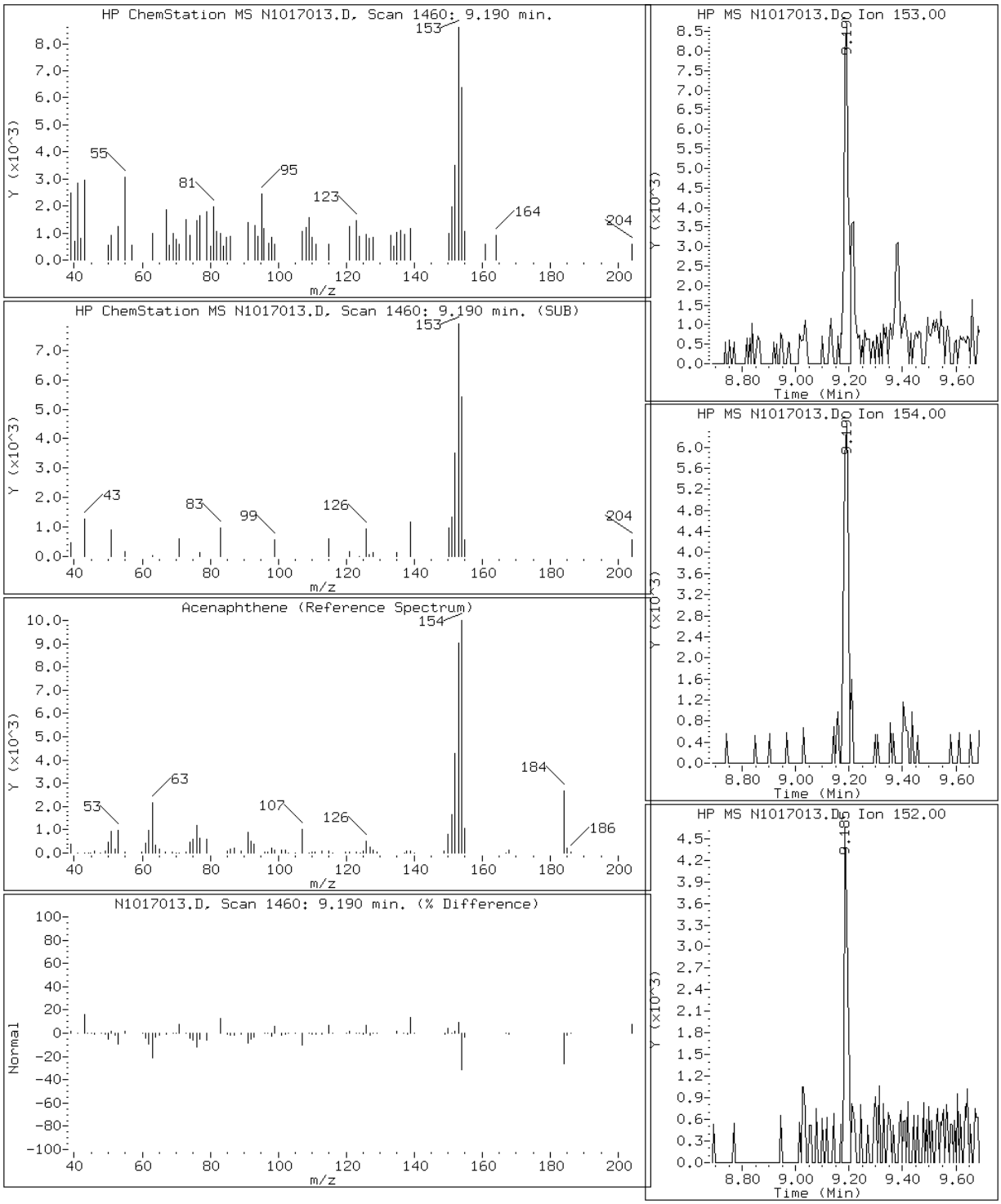
Data File: N1017013.D

Date: 17-OCT-2013 17:15

Client ID: MB-MW-04-20131009 Instrument: 733.i

Sample Info: 180-26012-B-5-A Operator: 3200

82 Acenaphthene



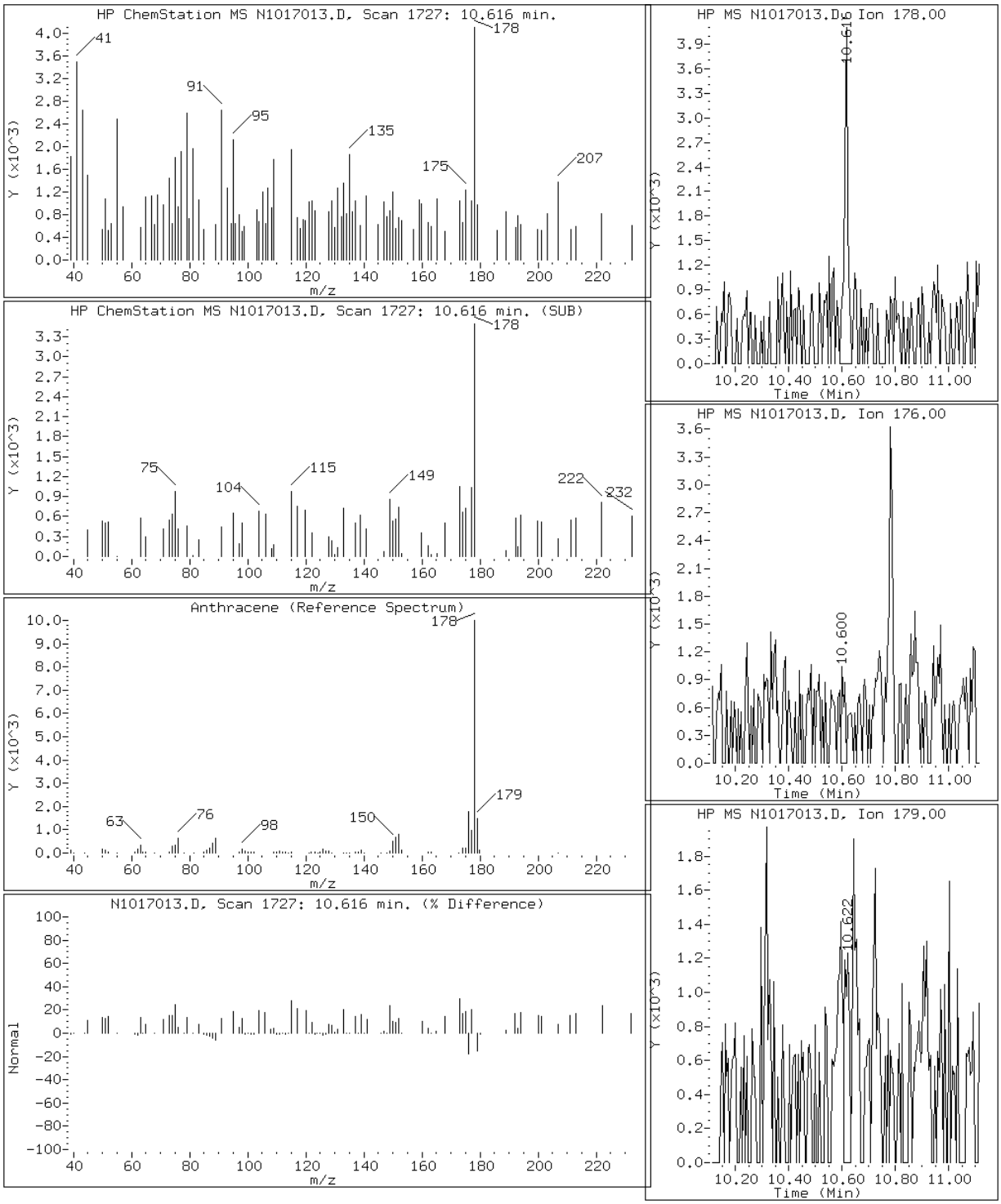
Data File: N1017013.D

Date: 17-OCT-2013 17:15

Client ID: MB-MW-04-20131009 Instrument: 733.i

Sample Info: 180-26012-B-5-A Operator: 3200

116 Anthracene



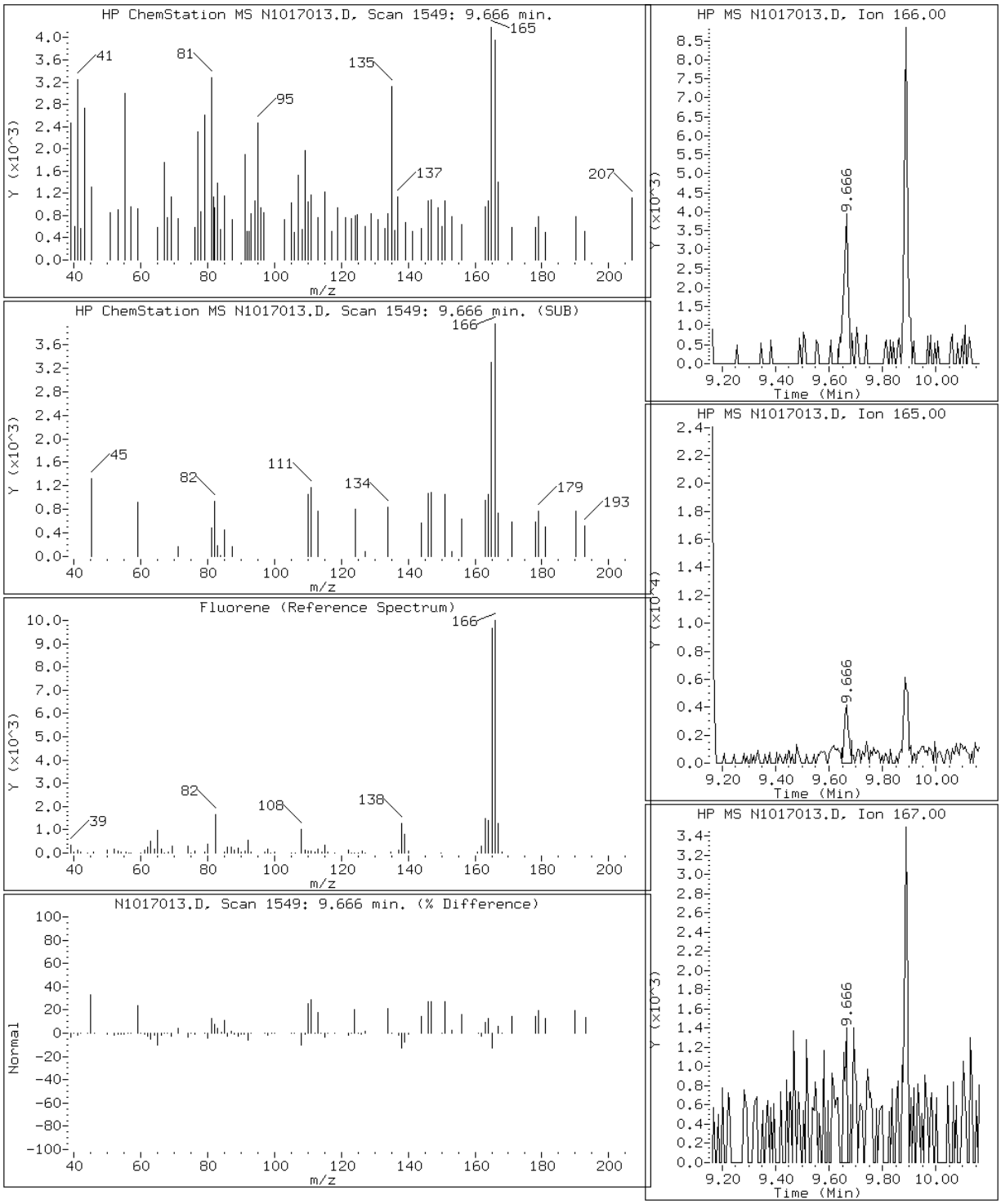
Data File: N1017013.D

Date: 17-OCT-2013 17:15

Client ID: MB-MW-04-20131009 Instrument: 733.i

Sample Info: 180-26012-B-5-A Operator: 3200

94 Fluorene



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-06-20131010 | Lab Sample ID: 180-26012-6

Matrix: Water | Lab File ID: N1018005.D

Analysis Method: 8270D | Date Collected: 10/10/2013 08:10

Extract. Method: 3520C | Date Extracted: 10/17/2013 06:31

Sample wt/vol: 1030(mL) | Date Analyzed: 10/18/2013 14:32

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87196 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	1.7	J	1.9	0.14
208-96-8	Acenaphthylene	ND		1.9	0.15
120-12-7	Anthracene	ND		1.9	0.15
56-55-3	Benzo[a]anthracene	ND		1.9	0.14
50-32-8	Benzo[a]pyrene	ND		1.9	0.13
205-99-2	Benzo[b]fluoranthene	ND		1.9	0.15
191-24-2	Benzo[g,h,i]perylene	ND		1.9	0.15
207-08-9	Benzo[k]fluoranthene	ND		1.9	0.53
117-81-7	Bis(2-ethylhexyl) phthalate	ND		19	12
108-60-1	2,2'-oxybis[1-chloropropane]	ND		1.9	0.19
101-55-3	4-Bromophenyl phenyl ether	ND		9.7	0.62
85-68-7	Butyl benzyl phthalate	ND		9.7	1.4
86-74-8	Carbazole	ND		1.9	0.15
106-47-8	4-Chloroaniline	ND		9.7	0.86
91-58-7	2-Chloronaphthalene	ND		1.9	0.15
7005-72-3	4-Chlorophenyl phenyl ether	ND		9.7	0.49
218-01-9	Chrysene	ND		1.9	0.14
53-70-3	Dibenz(a,h)anthracene	ND		1.9	0.15
132-64-9	Dibenzofuran	ND		9.7	0.60
84-74-2	Di-n-butyl phthalate	ND		9.7	1.2
91-94-1	3,3'-Dichlorobenzidine	ND		9.7	1.1
84-66-2	Diethyl phthalate	ND		9.7	1.4
131-11-3	Dimethyl phthalate	ND		9.7	0.74
121-14-2	2,4-Dinitrotoluene	ND		9.7	0.52
606-20-2	2,6-Dinitrotoluene	ND		9.7	0.77
117-84-0	Di-n-octyl phthalate	ND		9.7	2.0
206-44-0	Fluoranthene	ND		1.9	0.16
86-73-7	Fluorene	ND		1.9	0.21
118-74-1	Hexachlorobenzene	ND		1.9	0.18
87-68-3	Hexachlorobutadiene	ND		1.9	0.16
77-47-4	Hexachlorocyclopentadiene	ND		9.7	0.50
67-72-1	Hexachloroethane	ND		9.7	0.61
193-39-5	Indeno[1,2,3-cd]pyrene	ND		1.9	0.19
78-59-1	Isophorone	ND		9.7	0.63

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-06-20131010 | Lab Sample ID: 180-26012-6

Matrix: Water | Lab File ID: N1018005.D

Analysis Method: 8270D | Date Collected: 10/10/2013 08:10

Extract. Method: 3520C | Date Extracted: 10/17/2013 06:31

Sample wt/vol: 1030(mL) | Date Analyzed: 10/18/2013 14:32

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87196 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
91-57-6	2-Methylnaphthalene	ND		1.9	0.12
91-20-3	Naphthalene	ND		1.9	0.14
88-74-4	2-Nitroaniline	ND		49	3.4
99-09-2	3-Nitroaniline	ND		49	3.1
100-01-6	4-Nitroaniline	ND		49	1.7
100-02-7	4-Nitrophenol	ND		49	6.3
98-95-3	Nitrobenzene	ND		19	0.82
621-64-7	N-Nitrosodi-n-propylamine	ND		1.9	0.30
86-30-6	N-Nitrosodiphenylamine	ND		9.7	0.83
85-01-8	Phenanthrene	ND		1.9	0.41
129-00-0	Pyrene	ND		1.9	0.15
59-50-7	4-Chloro-3-methylphenol	ND		9.7	0.73
95-57-8	2-Chlorophenol	ND		9.7	1.6
95-48-7	2-Methylphenol	ND		9.7	0.84
106-44-5	Methylphenol, 3 & 4	ND		9.7	0.88
120-83-2	2,4-Dichlorophenol	ND		1.9	0.32
105-67-9	2,4-Dimethylphenol	ND		9.7	0.83
51-28-5	2,4-Dinitrophenol	ND		49	6.0
534-52-1	4,6-Dinitro-2-methylphenol	ND		49	2.1
88-75-5	2-Nitrophenol	ND		9.7	1.7
87-86-5	Pentachlorophenol	ND		9.7	0.64
108-95-2	Phenol	ND		1.9	0.56
95-95-4	2,4,5-Trichlorophenol	ND		9.7	1.5
88-06-2	2,4,6-Trichlorophenol	ND		9.7	1.7
98-86-2	Acetophenone	ND		9.7	0.78
1912-24-9	Atrazine	ND		9.7	0.87
100-52-7	Benzaldehyde	ND		9.7	1.5
92-52-4	1,1'-Biphenyl	ND		9.7	0.40
105-60-2	Caprolactam	ND		49	12
111-91-1	Bis(2-chloroethoxy)methane	ND		9.7	0.56
111-44-4	Bis(2-chloroethyl)ether	ND		1.9	0.24

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-06-20131010 Lab Sample ID: 180-26012-6

Matrix: Water Lab File ID: N1018005.D

Analysis Method: 8270D Date Collected: 10/10/2013 08:10

Extract. Method: 3520C Date Extracted: 10/17/2013 06:31

Sample wt/vol: 1030(mL) Date Analyzed: 10/18/2013 14:32

Con. Extract Vol.: 10.0(mL) Dilution Factor: 1

Injection Volume: 2(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 87196 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	48		37-104
4165-62-2	Phenol-d5 (Surr)	34		30-102
321-60-8	2-Fluorobiphenyl	52		35-108
118-79-6	2,4,6-Tribromophenol (Surr)	63		33-122
367-12-4	2-Fluorophenol (Surr)	39		26-100
1718-51-0	Terphenyl-d14 (Surr)	29		25-130

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN101813D.b\N1018005.D
Lab Smp Id: 180-26012-B-6-A Client Smp ID: MB-MW-06-20131010
Inj Date : 18-OCT-2013 14:32
Operator : 3200 Inst ID: 733.i
Smp Info : 180-26012-B-6-A
Misc Info : 180-26012-B-6-A
Comment :
Method : \\PITSVR06\D\chem\733.i\TN101813D.b\T8270d.m
Meth Date : 19-Oct-2013 05:41 733.i Quant Type: ISTD
Cal Date : 09-OCT-2013 08:22 Cal File: N1009IC8.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: padepi.sub
Target Version: 4.14
Processing Host: PITPC-502

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
* 1	1,4-Dichlorobenzene-d4	152	6.276	6.275	(1.000)	170375	8.00000	
* 2	Naphthalene-d8	136	7.515	7.520	(1.000)	579431	8.00000	
* 3	Acenaphthene-d10	164	9.177	9.176	(1.000)	321668	8.00000	
* 4	Phenanthrene-d10	188	10.571	10.565	(1.000)	511101	8.00000	
* 5	Chrysene-d12	240	14.161	14.160	(1.000)	491105	8.00000	
* 6	Perylene-d12	264	17.104	17.120	(1.000)	413619	8.00000	
198	1,4-Dioxane	88	Compound Not Detected.					
10	N-Nitrosodimethylamine	74	Compound Not Detected.					
9	Pyridine	79	Compound Not Detected.					
16	Methyl methanesulfonate	80	Compound Not Detected.					
206	Benzaldehyde	77	Compound Not Detected.					
21	Aniline	93	Compound Not Detected.					
22	Phenol	94	Compound Not Detected.					
23	bis(2-Chloroethyl)ether	93	Compound Not Detected.					
24	2-Chlorophenol	128	Compound Not Detected.					
26	1,3-Dichlorobenzene	146	Compound Not Detected.					
27	1,4-Dichlorobenzene	146	Compound Not Detected.					
28	1,2-Dichlorobenzene	146	6.447	6.452	(1.027)	9186	0.28644	0.28644
217	Indene	116	Compound Not Detected.					
29	Benzyl Alcohol	108	6.276	6.414	(1.000)	557	0.03591	0.035910
30	2-Methylphenol	108	Compound Not Detected.					
31	2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
37	Acetophenone	105	Compound Not Detected.					
32	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
192	4-Methylphenol	108	Compound Not Detected.					
34	Hexachloroethane	117	Compound Not Detected.					
35	Nitrobenzene	77	Compound Not Detected.					
36	N-Nitrosopyrrolidine	100	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
41 Isophorone	82	Compound Not Detected.					
42 2-Nitrophenol	139	Compound Not Detected.					
43 2,4-Dimethylphenol	107	Compound Not Detected.					
44 bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
48 2,4-Dichlorophenol	162	Compound Not Detected.					
49 Benzoic Acid	122	Compound Not Detected.					
50 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
51 Naphthalene	128	Compound Not Detected.					
52 4-Chloroaniline	127	Compound Not Detected.					
54 2,6-Dichlorophenol	162	Compound Not Detected.					
56 Hexachlorobutadiene	224	Compound Not Detected.					
208 Caprolactam	113	Compound Not Detected.					
59 4-Chloro-3-Methylphenol	107	Compound Not Detected.					
62 2-Methylnaphthalene	142	Compound Not Detected.					
63 1-Methylnaphthalene	142	Compound Not Detected.					
64 Hexachlorocyclopentadiene	236	Compound Not Detected.					
65 1,2,4,5-Tetrachlorobenzene	215	Compound Not Detected.					
66 2,4,6-Trichlorophenol	196	Compound Not Detected.					
67 2,4,5-Trichlorophenol	196	Compound Not Detected.					
209 1,1'-Biphenyl	154	Compound Not Detected.					
70 2-Chloronaphthalene	162	Compound Not Detected.					
73 2-Nitroaniline	65	Compound Not Detected.					
76 Dimethylphthalate	163	Compound Not Detected.					
78 2,6-Dinitrotoluene	165	Compound Not Detected.					
79 Acenaphthylene	152	Compound Not Detected.					
81 3-Nitroaniline	138	Compound Not Detected.					
82 Acenaphthene	153	9.209	9.208	(1.003)	17257	0.35407	0.35407
83 2,4-Dinitrophenol	184	Compound Not Detected.					
85 4-Nitrophenol	109	Compound Not Detected.					
86 Dibenzofuran	168	Compound Not Detected.					
87 2,4-Dinitrotoluene	165	Compound Not Detected.					
91 2,3,5,6-Tetrachlorophenol	231	Compound Not Detected.					
88 2,3,4,6-Tetrachlorophenol	231	Compound Not Detected.					
92 2-Naphthylamine	143	Compound Not Detected.					
93 Diethylphthalate	149	9.535	9.534	(1.039)	10600	0.21805	0.21805
94 Fluorene	166	Compound Not Detected.					
95 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
96 4-Nitroaniline	138	Compound Not Detected.					
98 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
99 N-Nitrosodiphenylamine (1)	169	Compound Not Detected.					
100 1,2-Diphenylhydrazine	77	Compound Not Detected.					
106 4-Bromophenyl-phenylether	248	Compound Not Detected.					
107 Hexachlorobenzene	283	Compound Not Detected.					
210 Atrazine	200	Compound Not Detected.					
111 Pentachlorophenol	265	Compound Not Detected.					
115 Phenanthrene	178	Compound Not Detected.					
116 Anthracene	178	Compound Not Detected.					
119 Carbazole	167	Compound Not Detected.					
120 Di-n-Butylphthalate	149	Compound Not Detected.					
123 Fluoranthene	202	Compound Not Detected.					
124 Benzidine	184	Compound Not Detected.					
125 Pyrene	202	Compound Not Detected.					
131 Butylbenzylphthalate	149	Compound Not Detected.					
135 3,3'-Dichlorobenzidine	252	Compound Not Detected.					

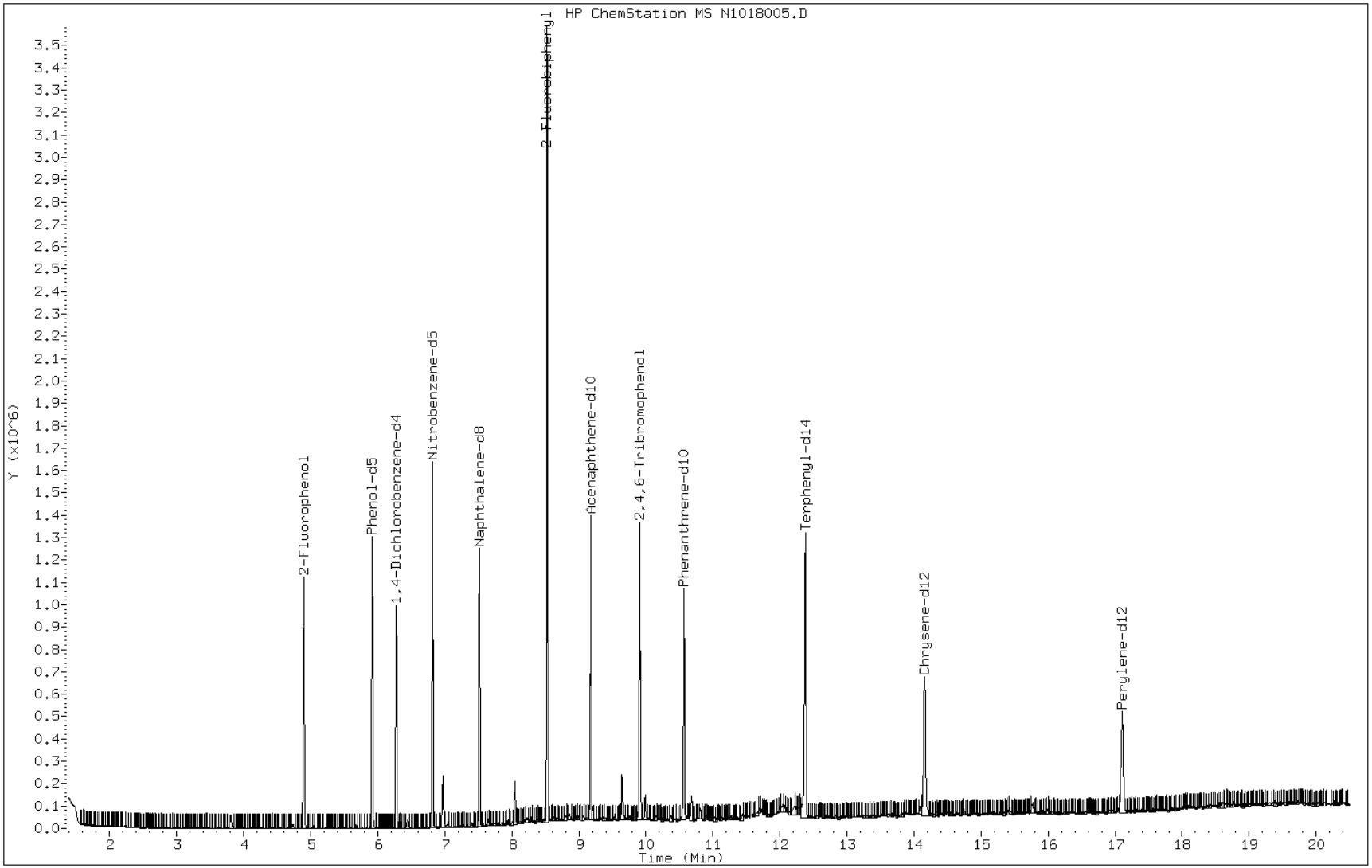
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ng)
136 Benzo(a)Anthracene	228	Compound Not Detected.					
137 Chrysene	228	Compound Not Detected.					
139 bis(2-ethylhexyl)Phthalate	149	14.097	14.096	(0.995)	11951	0.33792	0.33792
140 Di-n-octylphthalate	149	Compound Not Detected.					
141 Benzo(b)fluoranthene	252	Compound Not Detected.					
142 Benzo(k)fluoranthene	252	Compound Not Detected.					
143 7,12-dimethylbenz[a]anthracen	256	Compound Not Detected.					
146 Benzo(a)pyrene	252	Compound Not Detected.					
149 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
150 Dibenz(a,h)anthracene	278	Compound Not Detected.					
151 Benzo(g,h,i)perylene	276	Compound Not Detected.					
$ 154 Nitrobenzene-d5	82	6.815	6.820	(0.907)	498892	19.2271	19.227
$ 155 2-Fluorobiphenyl	172	8.525	8.530	(0.929)	1238692	20.7666	20.766
$ 156 Terphenyl-d14	244	12.377	12.376	(0.874)	685396	11.7945	11.794
$ 157 Phenol-d5	99	5.918	5.923	(0.943)	423165	13.5851	13.585
$ 158 2-Fluorophenol	112	4.892	4.892	(0.780)	408746	15.4176	15.418
$ 159 2,4,6-Tribromophenol	330	9.909	9.913	(0.937)	140557	25.0255	25.025

Data File: N1018005.D

Date: 18-OCT-2013 14:32

Client ID: MB-MW-06-20131010 Instrument: 733.i

Sample Info: 180-26012-B-6-A Operator: 3200



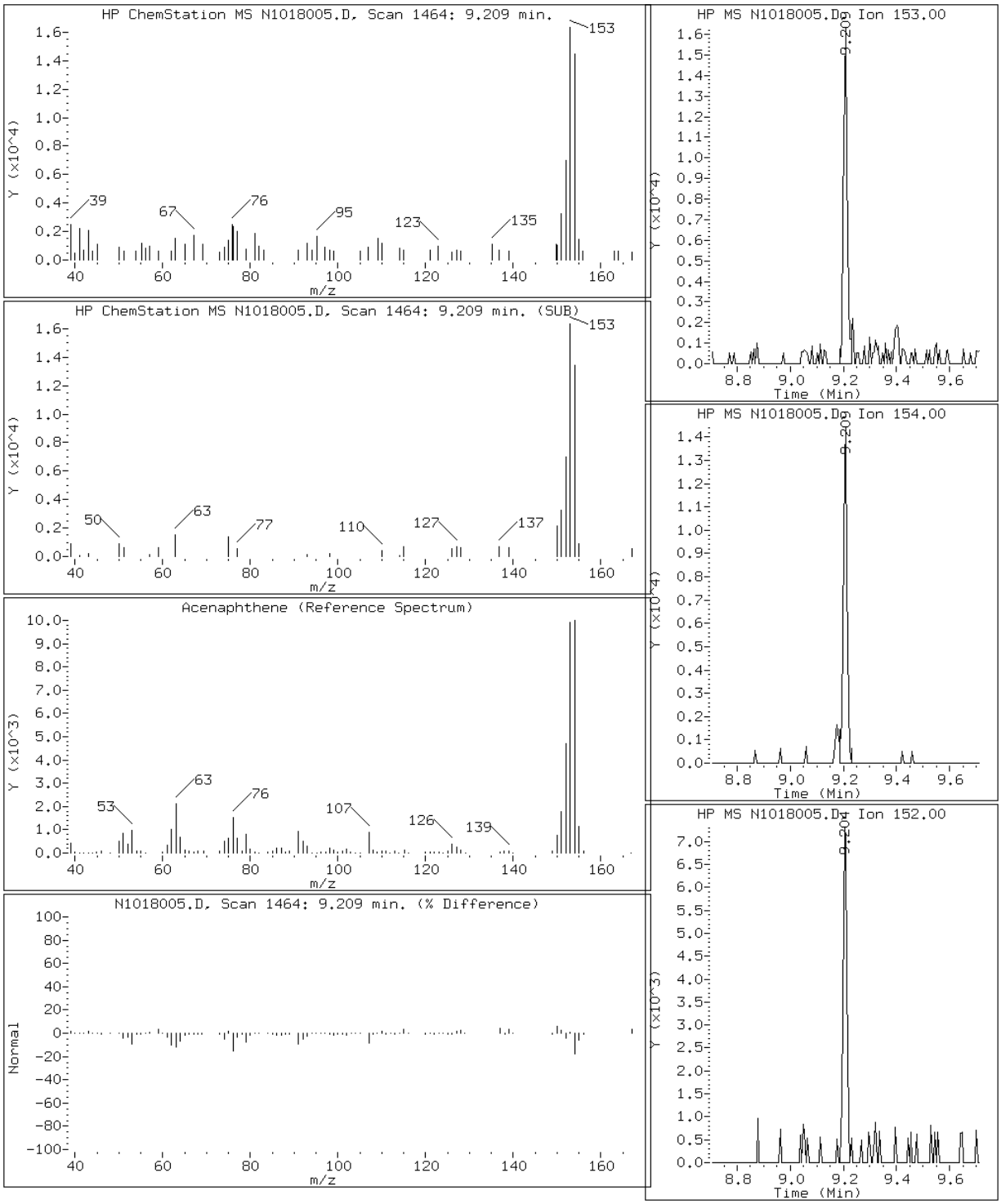
Data File: N1018005.D

Date: 18-OCT-2013 14:32

Client ID: MB-MW-06-20131010 Instrument: 733.i

Sample Info: 180-26012-B-6-A Operator: 3200

82 Acenaphthene



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: DUP-20131009 | Lab Sample ID: 180-26012-7

Matrix: Water | Lab File ID: N1017014.D

Analysis Method: 8270D | Date Collected: 10/09/2013 00:00

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1040(mL) | Date Analyzed: 10/17/2013 17:41

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	3.5		1.9	0.14
208-96-8	Acenaphthylene	ND		1.9	0.15
120-12-7	Anthracene	0.53	J	1.9	0.15
56-55-3	Benzo[a]anthracene	ND		1.9	0.14
50-32-8	Benzo[a]pyrene	ND		1.9	0.13
205-99-2	Benzo[b]fluoranthene	ND		1.9	0.15
191-24-2	Benzo[g,h,i]perylene	ND		1.9	0.15
207-08-9	Benzo[k]fluoranthene	ND		1.9	0.53
117-81-7	Bis(2-ethylhexyl) phthalate	ND		19	12
108-60-1	2,2'-oxybis[1-chloropropane]	ND		1.9	0.19
101-55-3	4-Bromophenyl phenyl ether	ND		9.6	0.61
85-68-7	Butyl benzyl phthalate	ND		9.6	1.4
86-74-8	Carbazole	ND		1.9	0.15
106-47-8	4-Chloroaniline	ND		9.6	0.85
91-58-7	2-Chloronaphthalene	ND		1.9	0.15
7005-72-3	4-Chlorophenyl phenyl ether	ND		9.6	0.48
218-01-9	Chrysene	ND		1.9	0.13
53-70-3	Dibenz(a,h)anthracene	ND		1.9	0.15
132-64-9	Dibenzofuran	ND		9.6	0.59
84-74-2	Di-n-butyl phthalate	ND		9.6	1.2
91-94-1	3,3'-Dichlorobenzidine	ND		9.6	1.1
84-66-2	Diethyl phthalate	ND		9.6	1.4
131-11-3	Dimethyl phthalate	ND		9.6	0.74
121-14-2	2,4-Dinitrotoluene	ND		9.6	0.52
606-20-2	2,6-Dinitrotoluene	ND		9.6	0.77
117-84-0	Di-n-octyl phthalate	ND		9.6	2.0
206-44-0	Fluoranthene	ND		1.9	0.16
86-73-7	Fluorene	1.8	J	1.9	0.21
118-74-1	Hexachlorobenzene	ND		1.9	0.18
87-68-3	Hexachlorobutadiene	ND		1.9	0.16
77-47-4	Hexachlorocyclopentadiene	ND		9.6	0.50
67-72-1	Hexachloroethane	ND		9.6	0.60
193-39-5	Indeno[1,2,3-cd]pyrene	ND		1.9	0.19
78-59-1	Isophorone	ND		9.6	0.62

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: DUP-20131009 | Lab Sample ID: 180-26012-7

Matrix: Water | Lab File ID: N1017014.D

Analysis Method: 8270D | Date Collected: 10/09/2013 00:00

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1040(mL) | Date Analyzed: 10/17/2013 17:41

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
91-57-6	2-Methylnaphthalene	ND		1.9	0.12
91-20-3	Naphthalene	ND		1.9	0.13
88-74-4	2-Nitroaniline	ND		48	3.4
99-09-2	3-Nitroaniline	ND		48	3.1
100-01-6	4-Nitroaniline	ND		48	1.7
100-02-7	4-Nitrophenol	ND		48	6.2
98-95-3	Nitrobenzene	ND		19	0.81
621-64-7	N-Nitrosodi-n-propylamine	ND		1.9	0.30
86-30-6	N-Nitrosodiphenylamine	ND		9.6	0.82
85-01-8	Phenanthrene	ND		1.9	0.41
129-00-0	Pyrene	ND		1.9	0.15
59-50-7	4-Chloro-3-methylphenol	ND		9.6	0.73
95-57-8	2-Chlorophenol	ND		9.6	1.6
95-48-7	2-Methylphenol	ND		9.6	0.83
106-44-5	Methylphenol, 3 & 4	ND		9.6	0.87
120-83-2	2,4-Dichlorophenol	ND		1.9	0.32
105-67-9	2,4-Dimethylphenol	ND		9.6	0.82
51-28-5	2,4-Dinitrophenol	ND		48	5.9
534-52-1	4,6-Dinitro-2-methylphenol	ND		48	2.1
88-75-5	2-Nitrophenol	ND		9.6	1.6
87-86-5	Pentachlorophenol	ND		9.6	0.64
108-95-2	Phenol	ND		1.9	0.56
95-95-4	2,4,5-Trichlorophenol	ND		9.6	1.5
88-06-2	2,4,6-Trichlorophenol	ND		9.6	1.7
98-86-2	Acetophenone	ND		9.6	0.77
1912-24-9	Atrazine	ND		9.6	0.86
100-52-7	Benzaldehyde	ND		9.6	1.4
92-52-4	1,1'-Biphenyl	ND		9.6	0.40
105-60-2	Caprolactam	ND		48	11
111-91-1	Bis(2-chloroethoxy)methane	ND		9.6	0.56
111-44-4	Bis(2-chloroethyl)ether	ND		1.9	0.24

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Client Sample ID: DUP-20131009 Lab Sample ID: 180-26012-7

Matrix: Water Lab File ID: N1017014.D

Analysis Method: 8270D Date Collected: 10/09/2013 00:00

Extract. Method: 3520C Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1040(mL) Date Analyzed: 10/17/2013 17:41

Con. Extract Vol.: 10.0(mL) Dilution Factor: 1

Injection Volume: 2(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	56		37-104
4165-62-2	Phenol-d5 (Surr)	43		30-102
321-60-8	2-Fluorobiphenyl	58		35-108
118-79-6	2,4,6-Tribromophenol (Surr)	68		33-122
367-12-4	2-Fluorophenol (Surr)	46		26-100
1718-51-0	Terphenyl-d14 (Surr)	31		25-130

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN101713D.b\N1017014.D
Lab Smp Id: 180-26012-B-7-A Client Smp ID: DUP-20131009
Inj Date : 17-OCT-2013 17:41
Operator : 3200 Inst ID: 733.i
Smp Info : 180-26012-B-7-A
Misc Info : 180-26012-B-7-A
Comment :
Method : \\PITSVR06\D\chem\733.i\TN101713D.b\T8270d.m
Meth Date : 17-Oct-2013 11:57 piccolinov Quant Type: ISTD
Cal Date : 09-OCT-2013 08:22 Cal File: N1009IC8.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: padepi.sub
Target Version: 4.14
Processing Host: PITPC-502

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
* 1	1,4-Dichlorobenzene-d4	152	6.281	6.271	(1.000)	146745	8.00000	
* 2	Naphthalene-d8	136	7.510	7.505	(1.000)	461749	8.00000	
* 3	Acenaphthene-d10	164	9.155	9.156	(1.000)	247124	8.00000	
* 4	Phenanthrene-d10	188	10.539	10.540	(1.000)	394237	8.00000	
* 5	Chrysene-d12	240	14.096	14.113	(1.000)	406935	8.00000	
* 6	Perylene-d12	264	17.029	17.062	(1.000)	367637	8.00000	
198	1,4-Dioxane	88	Compound Not Detected.					
10	N-Nitrosodimethylamine	74	Compound Not Detected.					
9	Pyridine	79	Compound Not Detected.					
16	Methyl methanesulfonate	80	Compound Not Detected.					
206	Benzaldehyde	77	Compound Not Detected.					
21	Aniline	93	Compound Not Detected.					
22	Phenol	94	Compound Not Detected.					
23	bis(2-Chloroethyl)ether	93	Compound Not Detected.					
24	2-Chlorophenol	128	Compound Not Detected.					
26	1,3-Dichlorobenzene	146	6.228	6.218	(0.991)	1879	0.06511	0.065106
27	1,4-Dichlorobenzene	146	6.297	6.293	(1.003)	8598	0.29103	0.29103
28	1,2-Dichlorobenzene	146	6.452	6.442	(1.027)	1709	0.06187	0.061872
217	Indene	116	Compound Not Detected.					
29	Benzyl Alcohol	108	Compound Not Detected.					
30	2-Methylphenol	108	Compound Not Detected.					
31	2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
37	Acetophenone	105	Compound Not Detected.					
32	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
192	4-Methylphenol	108	Compound Not Detected.					
34	Hexachloroethane	117	Compound Not Detected.					
35	Nitrobenzene	77	Compound Not Detected.					
36	N-Nitrosopyrrolidine	100	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
41	Isophorone	82	Compound Not Detected.					
42	2-Nitrophenol	139	Compound Not Detected.					
43	2,4-Dimethylphenol	107	Compound Not Detected.					
44	bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
48	2,4-Dichlorophenol	162	Compound Not Detected.					
49	Benzoic Acid	122	Compound Not Detected.					
50	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
51	Naphthalene	128	Compound Not Detected.					
52	4-Chloroaniline	127	Compound Not Detected.					
54	2,6-Dichlorophenol	162	Compound Not Detected.					
56	Hexachlorobutadiene	224	Compound Not Detected.					
208	Caprolactam	113	Compound Not Detected.					
59	4-Chloro-3-Methylphenol	107	Compound Not Detected.					
62	2-Methylnaphthalene	142	Compound Not Detected.					
63	1-Methylnaphthalene	142	Compound Not Detected.					
64	Hexachlorocyclopentadiene	236	Compound Not Detected.					
65	1,2,4,5-Tetrachlorobenzene	215	Compound Not Detected.					
66	2,4,6-Trichlorophenol	196	Compound Not Detected.					
67	2,4,5-Trichlorophenol	196	Compound Not Detected.					
209	1,1'-Biphenyl	154	Compound Not Detected.					
70	2-Chloronaphthalene	162	Compound Not Detected.					
73	2-Nitroaniline	65	Compound Not Detected.					
76	Dimethylphthalate	163	Compound Not Detected.					
78	2,6-Dinitrotoluene	165	Compound Not Detected.					
79	Acenaphthylene	152	Compound Not Detected.					
81	3-Nitroaniline	138	Compound Not Detected.					
82	Acenaphthene	153	9.187	9.188	(1.004)	27451	0.73313	0.73313
83	2,4-Dinitrophenol	184	Compound Not Detected.					
85	4-Nitrophenol	109	Compound Not Detected.					
86	Dibenzofuran	168	Compound Not Detected.					
87	2,4-Dinitrotoluene	165	Compound Not Detected.					
91	2,3,5,6-Tetrachlorophenol	231	Compound Not Detected.					
88	2,3,4,6-Tetrachlorophenol	231	Compound Not Detected.					
92	2-Naphthylamine	143	Compound Not Detected.					
93	Diethylphthalate	149	Compound Not Detected.					
94	Fluorene	166	9.663	9.663	(1.055)	15327	0.37247	0.37247
95	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
96	4-Nitroaniline	138	Compound Not Detected.					
98	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
99	N-Nitrosodiphenylamine (1)	169	Compound Not Detected.					
100	1,2-Diphenylhydrazine	77	Compound Not Detected.					
106	4-Bromophenyl-phenylether	248	Compound Not Detected.					
107	Hexachlorobenzene	283	Compound Not Detected.					
210	Atrazine	200	Compound Not Detected.					
111	Pentachlorophenol	265	Compound Not Detected.					
115	Phenanthrene	178	Compound Not Detected.					
116	Anthracene	178	10.613	10.614	(1.007)	5982	0.10932	0.10932
119	Carbazole	167	Compound Not Detected.					
120	Di-n-Butylphthalate	149	Compound Not Detected.					
123	Fluoranthene	202	Compound Not Detected.					
124	Benzidine	184	Compound Not Detected.					
125	Pyrene	202	Compound Not Detected.					
131	Butylbenzylphthalate	149	Compound Not Detected.					
135	3,3'-Dichlorobenzidine	252	Compound Not Detected.					

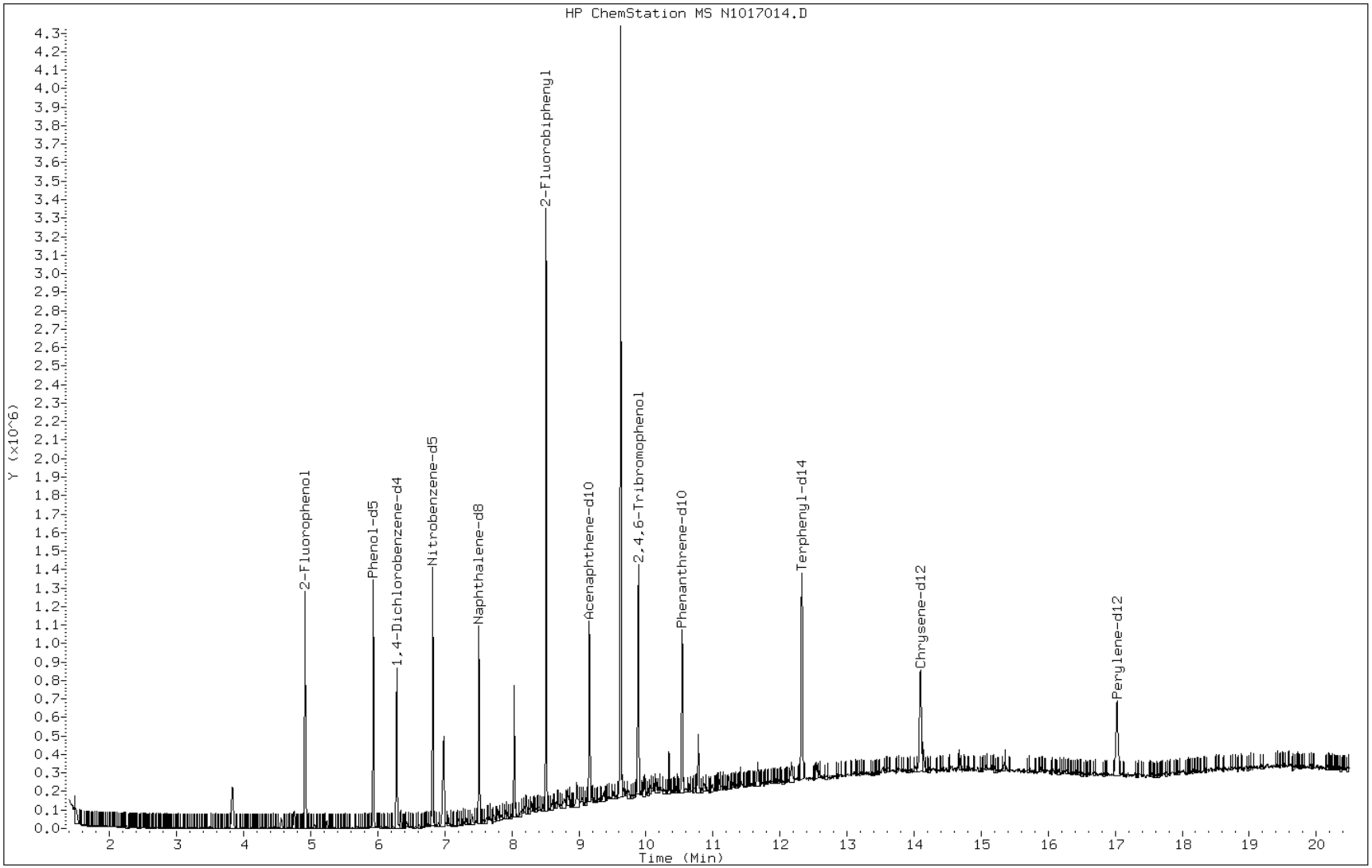
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
136 Benzo(a)Anthracene	228	Compound Not Detected.					
137 Chrysene	228	Compound Not Detected.					
139 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.					
140 Di-n-octylphthalate	149	Compound Not Detected.					
141 Benzo(b)fluoranthene	252	Compound Not Detected.					
142 Benzo(k)fluoranthene	252	Compound Not Detected.					
143 7,12-dimethylbenz[a]anthracen	256	Compound Not Detected.					
146 Benzo(a)pyrene	252	Compound Not Detected.					
149 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
150 Dibenz(a,h)anthracene	278	Compound Not Detected.					
151 Benzo(g,h,i)perylene	276	Compound Not Detected.					
$ 154 Nitrobenzene-d5	82	6.821	6.811	(0.908)	463244	22.4034	22.403
$ 155 2-Fluorobiphenyl	172	8.509	8.510	(0.929)	1067474	23.2944	23.294
$ 156 Terphenyl-d14	244	12.328	12.340	(0.875)	600818	12.4775	12.478
$ 157 Phenol-d5	99	5.934	5.913	(0.945)	465210	17.3398	17.340
$ 158 2-Fluorophenol	112	4.913	4.888	(0.782)	420913	18.4330	18.433
$ 159 2,4,6-Tribromophenol	330	9.887	9.888	(0.938)	118560	27.3664	27.366

Data File: N1017014.D

Date: 17-OCT-2013 17:41

Client ID: DUP-20131009 Instrument: 733.i

Sample Info: 180-26012-B-7-A Operator: 3200



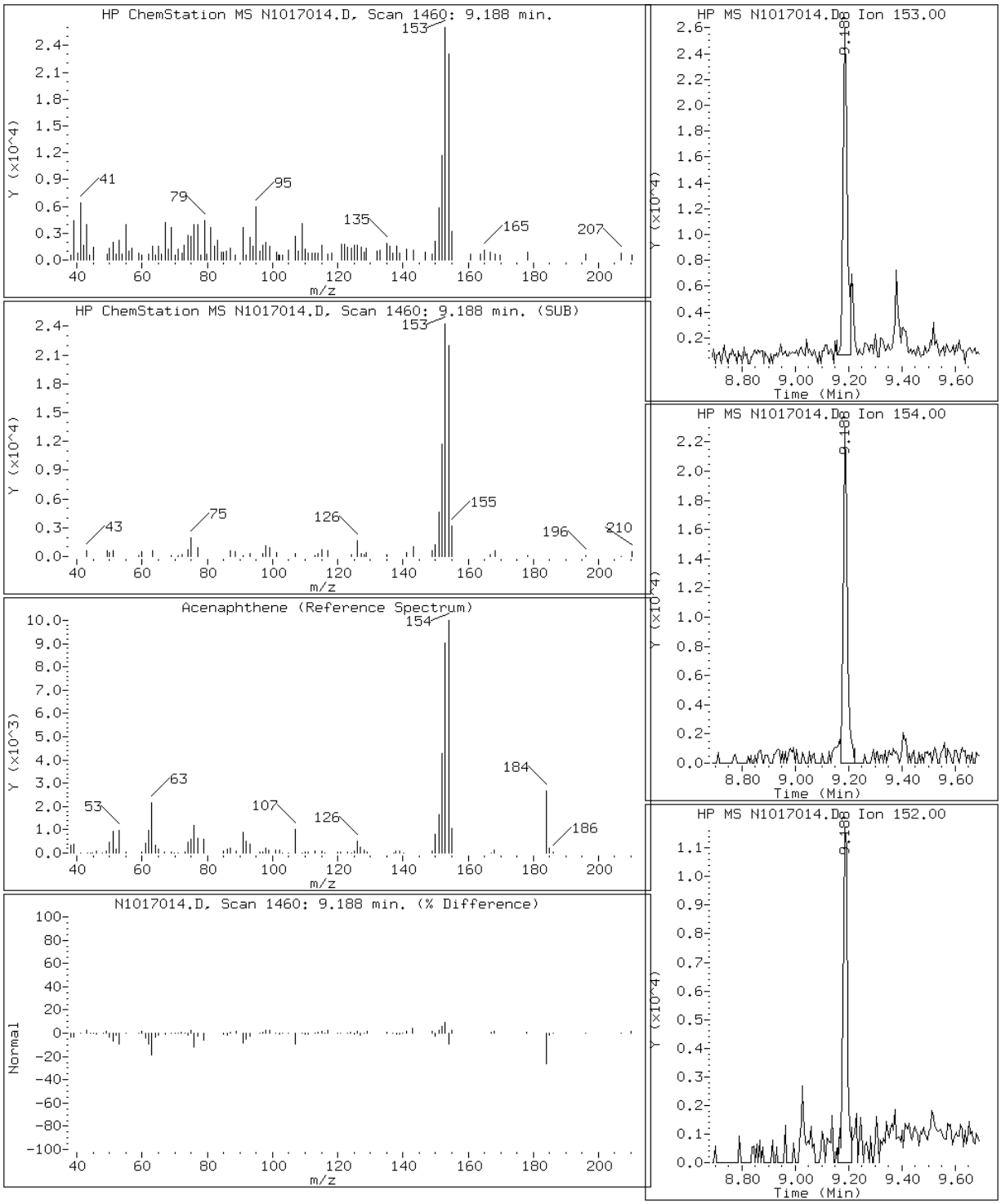
Data File: N1017014.D

Date: 17-OCT-2013 17:41

Client ID: DUP-20131009 Instrument: 733.i

Sample Info: 180-26012-B-7-A Operator: 3200

82 Acenaphthene



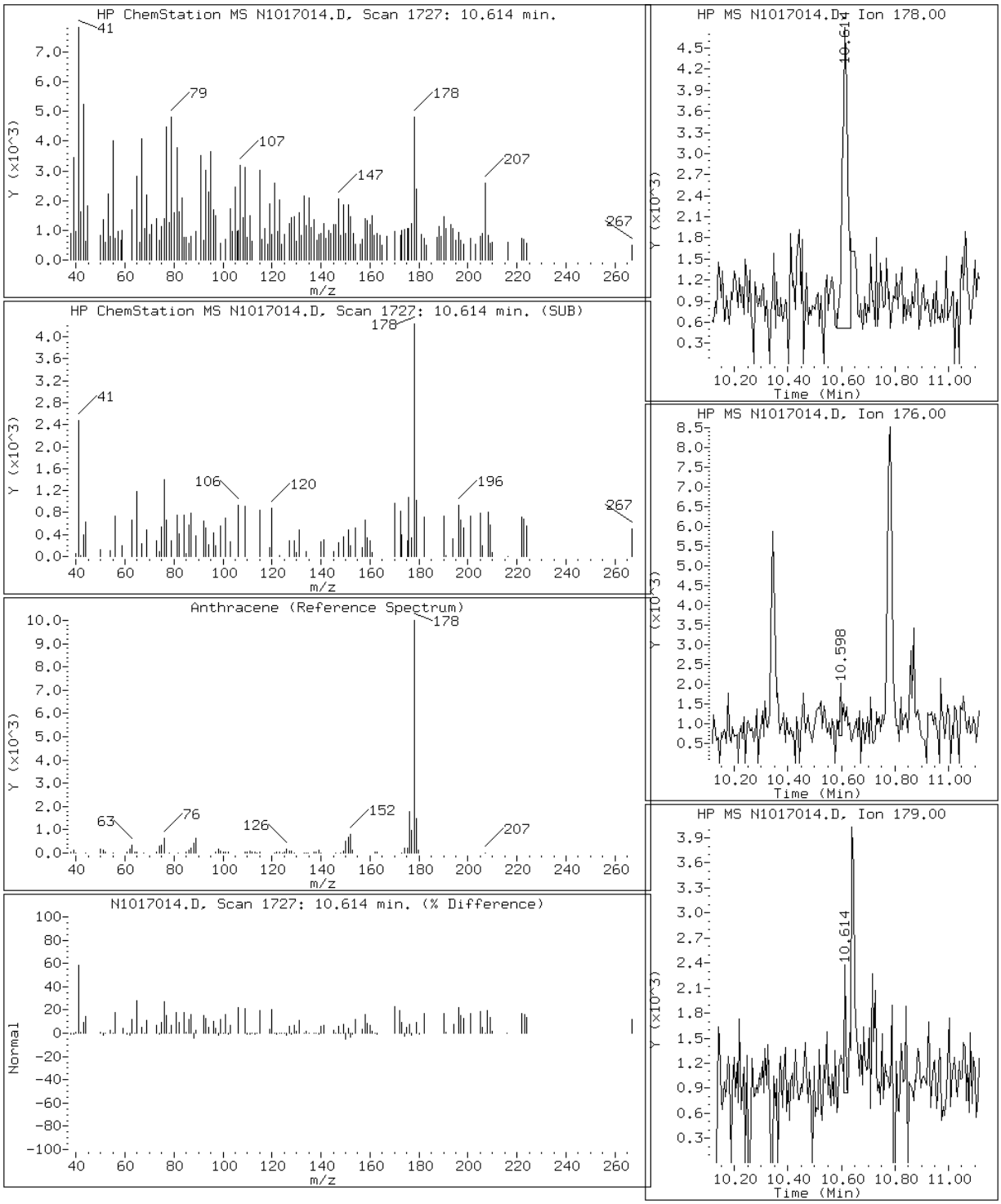
Data File: N1017014.D

Date: 17-OCT-2013 17:41

Client ID: DUP-20131009 Instrument: 733.i

Sample Info: 180-26012-B-7-A Operator: 3200

116 Anthracene



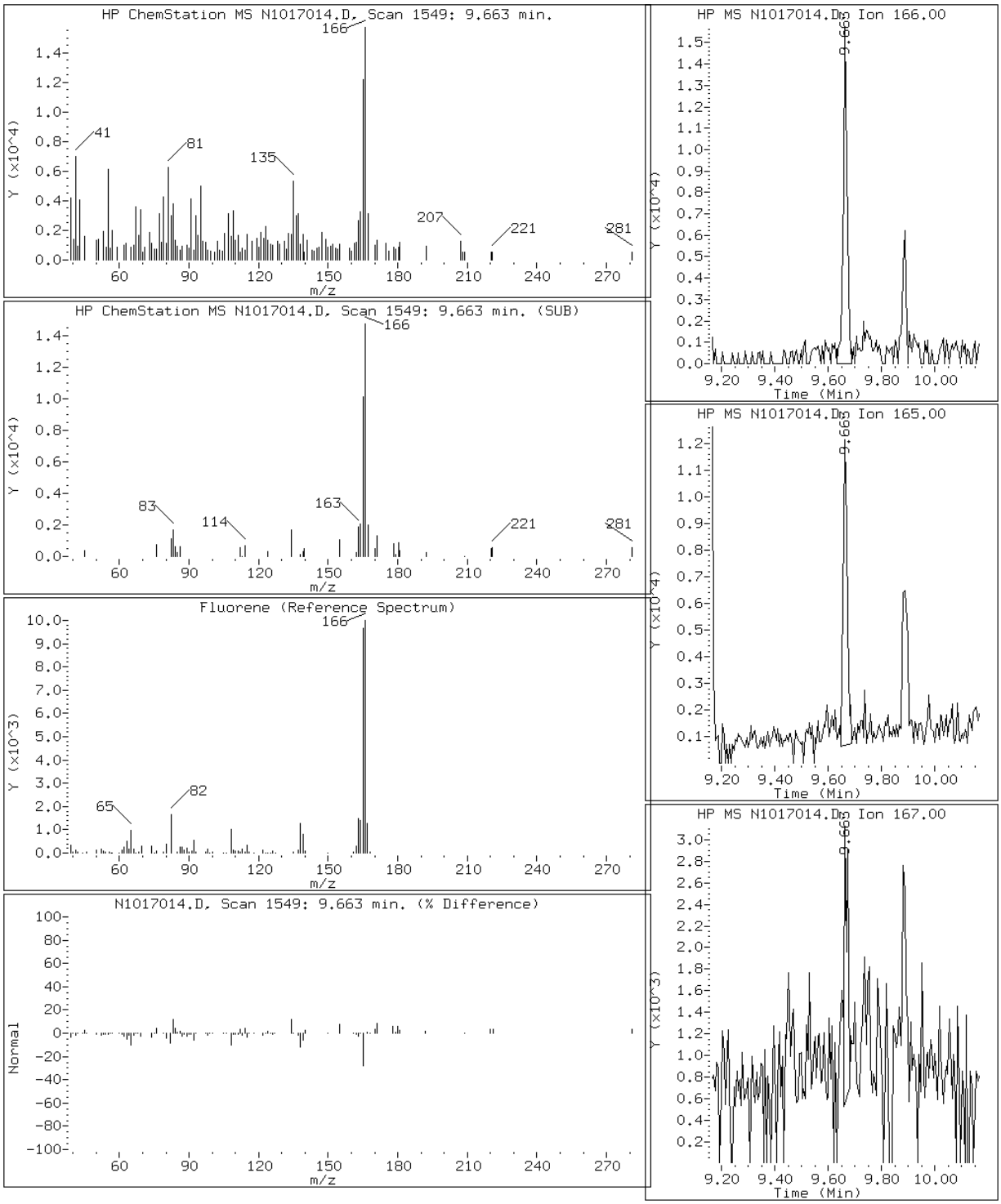
Data File: N1017014.D

Date: 17-OCT-2013 17:41

Client ID: DUP-20131009 Instrument: 733.i

Sample Info: 180-26012-B-7-A Operator: 3200

94 Fluorene



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-05-20131010 | Lab Sample ID: 180-26012-8

Matrix: Water | Lab File ID: N1018006.D

Analysis Method: 8270D | Date Collected: 10/10/2013 09:55

Extract. Method: 3520C | Date Extracted: 10/17/2013 06:31

Sample wt/vol: 1040(mL) | Date Analyzed: 10/18/2013 14:58

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87196 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	59		1.9	0.14
208-96-8	Acenaphthylene	2.0		1.9	0.15
120-12-7	Anthracene	5.5		1.9	0.15
56-55-3	Benzo[a]anthracene	ND		1.9	0.14
50-32-8	Benzo[a]pyrene	ND		1.9	0.13
205-99-2	Benzo[b]fluoranthene	ND		1.9	0.15
191-24-2	Benzo[g,h,i]perylene	ND		1.9	0.15
207-08-9	Benzo[k]fluoranthene	ND		1.9	0.53
117-81-7	Bis(2-ethylhexyl) phthalate	ND		19	12
108-60-1	2,2'-oxybis[1-chloropropane]	ND		1.9	0.19
101-55-3	4-Bromophenyl phenyl ether	ND		9.6	0.61
85-68-7	Butyl benzyl phthalate	ND		9.6	1.4
86-74-8	Carbazole	44		1.9	0.15
106-47-8	4-Chloroaniline	ND		9.6	0.85
91-58-7	2-Chloronaphthalene	ND		1.9	0.15
7005-72-3	4-Chlorophenyl phenyl ether	ND		9.6	0.48
218-01-9	Chrysene	ND		1.9	0.13
53-70-3	Dibenz(a,h)anthracene	ND		1.9	0.15
132-64-9	Dibenzofuran	33		9.6	0.59
84-74-2	Di-n-butyl phthalate	ND		9.6	1.2
91-94-1	3,3'-Dichlorobenzidine	ND		9.6	1.1
84-66-2	Diethyl phthalate	ND		9.6	1.4
131-11-3	Dimethyl phthalate	ND		9.6	0.74
121-14-2	2,4-Dinitrotoluene	ND		9.6	0.52
606-20-2	2,6-Dinitrotoluene	ND		9.6	0.77
117-84-0	Di-n-octyl phthalate	ND		9.6	2.0
206-44-0	Fluoranthene	7.5		1.9	0.16
86-73-7	Fluorene	41		1.9	0.21
118-74-1	Hexachlorobenzene	ND		1.9	0.18
87-68-3	Hexachlorobutadiene	ND		1.9	0.16
77-47-4	Hexachlorocyclopentadiene	ND		9.6	0.50
67-72-1	Hexachloroethane	ND		9.6	0.60
193-39-5	Indeno[1,2,3-cd]pyrene	ND		1.9	0.19
78-59-1	Isophorone	ND		9.6	0.62

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-05-20131010 | Lab Sample ID: 180-26012-8

Matrix: Water | Lab File ID: N1018006.D

Analysis Method: 8270D | Date Collected: 10/10/2013 09:55

Extract. Method: 3520C | Date Extracted: 10/17/2013 06:31

Sample wt/vol: 1040(mL) | Date Analyzed: 10/18/2013 14:58

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87196 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
91-57-6	2-Methylnaphthalene	44		1.9	0.12
91-20-3	Naphthalene	270		1.9	0.13
88-74-4	2-Nitroaniline	ND		48	3.4
99-09-2	3-Nitroaniline	ND		48	3.1
100-01-6	4-Nitroaniline	ND		48	1.7
100-02-7	4-Nitrophenol	ND		48	6.2
98-95-3	Nitrobenzene	ND		19	0.81
621-64-7	N-Nitrosodi-n-propylamine	ND		1.9	0.30
86-30-6	N-Nitrosodiphenylamine	ND		9.6	0.82
85-01-8	Phenanthrene	42		1.9	0.41
129-00-0	Pyrene	3.4		1.9	0.15
59-50-7	4-Chloro-3-methylphenol	ND		9.6	0.73
95-57-8	2-Chlorophenol	ND		9.6	1.6
95-48-7	2-Methylphenol	ND		9.6	0.83
106-44-5	Methylphenol, 3 & 4	ND		9.6	0.87
120-83-2	2,4-Dichlorophenol	ND		1.9	0.32
105-67-9	2,4-Dimethylphenol	67		9.6	0.82
51-28-5	2,4-Dinitrophenol	ND		48	5.9
534-52-1	4,6-Dinitro-2-methylphenol	ND		48	2.1
88-75-5	2-Nitrophenol	ND		9.6	1.6
87-86-5	Pentachlorophenol	ND		9.6	0.64
108-95-2	Phenol	ND		1.9	0.56
95-95-4	2,4,5-Trichlorophenol	ND		9.6	1.5
88-06-2	2,4,6-Trichlorophenol	ND		9.6	1.7
98-86-2	Acetophenone	ND		9.6	0.77
1912-24-9	Atrazine	ND		9.6	0.86
100-52-7	Benzaldehyde	ND		9.6	1.4
92-52-4	1,1'-Biphenyl	9.3	J	9.6	0.40
105-60-2	Caprolactam	ND		48	11
111-91-1	Bis(2-chloroethoxy)methane	ND		9.6	0.56
111-44-4	Bis(2-chloroethyl)ether	ND		1.9	0.24

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-05-20131010 Lab Sample ID: 180-26012-8

Matrix: Water Lab File ID: N1018006.D

Analysis Method: 8270D Date Collected: 10/10/2013 09:55

Extract. Method: 3520C Date Extracted: 10/17/2013 06:31

Sample wt/vol: 1040(mL) Date Analyzed: 10/18/2013 14:58

Con. Extract Vol.: 10.0(mL) Dilution Factor: 1

Injection Volume: 2(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 87196 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	51		37-104
4165-62-2	Phenol-d5 (Surr)	44		30-102
321-60-8	2-Fluorobiphenyl	54		35-108
118-79-6	2,4,6-Tribromophenol (Surr)	74		33-122
367-12-4	2-Fluorophenol (Surr)	44		26-100
1718-51-0	Terphenyl-d14 (Surr)	27		25-130

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN101813D.b\N1018006.D
Lab Smp Id: 180-26012-D-8-A Client Smp ID: MB-MW-05-20131010
Inj Date : 18-OCT-2013 14:58
Operator : 3200 Inst ID: 733.i
Smp Info : 180-26012-D-8-A
Misc Info : 180-26012-D-8-A
Comment :
Method : \\PITSVR06\D\chem\733.i\TN101813D.b\T8270d.m
Meth Date : 19-Oct-2013 05:41 733.i Quant Type: ISTD
Cal Date : 09-OCT-2013 08:22 Cal File: N1009IC8.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: padepi.sub
Target Version: 4.14
Processing Host: PITPC-502

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
* 1	1,4-Dichlorobenzene-d4	152	6.270	6.275	(1.000)	155883	8.00000	
* 2	Naphthalene-d8	136	7.509	7.520	(1.000)	509483	8.00000	
* 3	Acenaphthene-d10	164	9.171	9.176	(1.000)	283259	8.00000	
* 4	Phenanthrene-d10	188	10.565	10.565	(1.000)	425480	8.00000	
* 5	Chrysene-d12	240	14.150	14.160	(1.000)	459367	8.00000	
* 6	Perylene-d12	264	17.098	17.120	(1.000)	424943	8.00000	
198	1,4-Dioxane	88	1.735	1.702	(0.277)	7686	0.75777	0.75777(M)
10	N-Nitrosodimethylamine	74	Compound Not Detected.					
9	Pyridine	79	Compound Not Detected.					
16	Methyl methanesulfonate	80	Compound Not Detected.					
206	Benzaldehyde	77	Compound Not Detected.					
21	Aniline	93	Compound Not Detected.					
22	Phenol	94	Compound Not Detected.					
23	bis(2-Chloroethyl)ether	93	Compound Not Detected.					
24	2-Chlorophenol	128	Compound Not Detected.					
26	1,3-Dichlorobenzene	146	6.217	6.222	(0.991)	11102	0.36213	0.36212
27	1,4-Dichlorobenzene	146	6.286	6.297	(1.003)	64781	2.06420	2.0642
28	1,2-Dichlorobenzene	146	6.441	6.452	(1.027)	8167	0.27834	0.27834
217	Indene	116	6.526	6.537	(1.041)	66229	1.53263	1.5326
29	Benzyl Alcohol	108	Compound Not Detected.					
30	2-Methylphenol	108	Compound Not Detected.					
31	2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
37	Acetophenone	105	Compound Not Detected.					
32	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
192	4-Methylphenol	108	Compound Not Detected.					
34	Hexachloroethane	117	Compound Not Detected.					
35	Nitrobenzene	77	Compound Not Detected.					
36	N-Nitrosopyrrolidine	100	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
41	Isophorone	82	Compound Not Detected.					
42	2-Nitrophenol	139	Compound Not Detected.					
43	2,4-Dimethylphenol	107	7.173	7.184	(0.955)	278793	13.8543	13.854
44	bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
48	2,4-Dichlorophenol	162	7.386	7.381	(0.984)	1267	0.06103	0.061032
49	Benzoic Acid	122	Compound Not Detected.					
50	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
51	Naphthalene	128	7.531	7.541	(1.003)	3764071	55.6921	55.692
52	4-Chloroaniline	127	Compound Not Detected.					
54	2,6-Dichlorophenol	162	Compound Not Detected.					
56	Hexachlorobutadiene	224	Compound Not Detected.					
208	Caprolactam	113	Compound Not Detected.					
59	4-Chloro-3-Methylphenol	107	Compound Not Detected.					
62	2-Methylnaphthalene	142	8.188	8.193	(1.090)	429367	9.11610	9.1161
63	1-Methylnaphthalene	142	8.279	8.289	(1.102)	292285	6.78370	6.7837
64	Hexachlorocyclopentadiene	236	Compound Not Detected.					
65	1,2,4,5-Tetrachlorobenzene	215	Compound Not Detected.					
66	2,4,6-Trichlorophenol	196	Compound Not Detected.					
67	2,4,5-Trichlorophenol	196	Compound Not Detected.					
209	1,1'-Biphenyl	154	8.621	8.626	(0.940)	105274	1.92492	1.9249
70	2-Chloronaphthalene	162	Compound Not Detected.					
73	2-Nitroaniline	65	Compound Not Detected.					
76	Dimethylphthalate	163	Compound Not Detected.					
78	2,6-Dinitrotoluene	165	Compound Not Detected.					
79	Acenaphthylene	152	9.043	9.048	(0.986)	27421	0.41828	0.41828
81	3-Nitroaniline	138	Compound Not Detected.					
82	Acenaphthene	153	9.203	9.208	(1.003)	524976	12.2318	12.232
83	2,4-Dinitrophenol	184	Compound Not Detected.					
85	4-Nitrophenol	109	Compound Not Detected.					
86	Dibenzofuran	168	9.358	9.368	(1.020)	400142	6.82112	6.8211
87	2,4-Dinitrotoluene	165	Compound Not Detected.					
91	2,3,5,6-Tetrachlorophenol	231	Compound Not Detected.					
88	2,3,4,6-Tetrachlorophenol	231	Compound Not Detected.					
92	2-Naphthylamine	143	Compound Not Detected.					
93	Diethylphthalate	149	Compound Not Detected.					
94	Fluorene	166	9.678	9.689	(1.055)	402245	8.52816	8.5282
95	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
96	4-Nitroaniline	138	Compound Not Detected.					
98	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
99	N-Nitrosodiphenylamine (1)	169	Compound Not Detected.					
100	1,2-Diphenylhydrazine	77	Compound Not Detected.					
106	4-Bromophenyl-phenylether	248	Compound Not Detected.					
107	Hexachlorobenzene	283	Compound Not Detected.					
210	Atrazine	200	Compound Not Detected.					
111	Pentachlorophenol	265	Compound Not Detected.					
115	Phenanthrene	178	10.586	10.592	(1.002)	525885	8.82466	8.8247
116	Anthracene	178	10.635	10.640	(1.007)	67892	1.14961	1.1496
119	Carbazole	167	10.784	10.784	(1.021)	468892	9.17333	9.1733
120	Di-n-Butylphthalate	149	Compound Not Detected.					
123	Fluoranthene	202	11.906	11.911	(1.127)	102912	1.55499	1.5550
124	Benzidine	184	Compound Not Detected.					
125	Pyrene	202	12.210	12.216	(0.863)	52268	0.71699	0.71698
131	Butylbenzylphthalate	149	Compound Not Detected.					
135	3,3'-Dichlorobenzidine	252	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
136 Benzo(a)Anthracene	228	Compound Not Detected.					
137 Chrysene	228	Compound Not Detected.					
139 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.					
140 Di-n-octylphthalate	149	Compound Not Detected.					
141 Benzo(b)fluoranthene	252	Compound Not Detected.					
142 Benzo(k)fluoranthene	252	Compound Not Detected.					
143 7,12-dimethylbenz[a]anthracen	256	Compound Not Detected.					
146 Benzo(a)pyrene	252	Compound Not Detected.					
149 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
150 Dibenz(a,h)anthracene	278	Compound Not Detected.					
151 Benzo(g,h,i)perylene	276	Compound Not Detected.					
$ 154 Nitrobenzene-d5	82	6.810	6.820	(0.907)	465761	20.4147	20.415
$ 155 2-Fluorobiphenyl	172	8.524	8.530	(0.930)	1126195	21.4407	21.441
$ 156 Terphenyl-d14	244	12.371	12.376	(0.874)	593971	10.9274	10.927
$ 157 Phenol-d5	99	5.912	5.923	(0.943)	496914	17.4357	17.436
$ 158 2-Fluorophenol	112	4.892	4.892	(0.780)	426103	17.5664	17.566
$ 159 2,4,6-Tribromophenol	330	9.908	9.913	(0.938)	137853	29.4832	29.483

QC Flag Legend

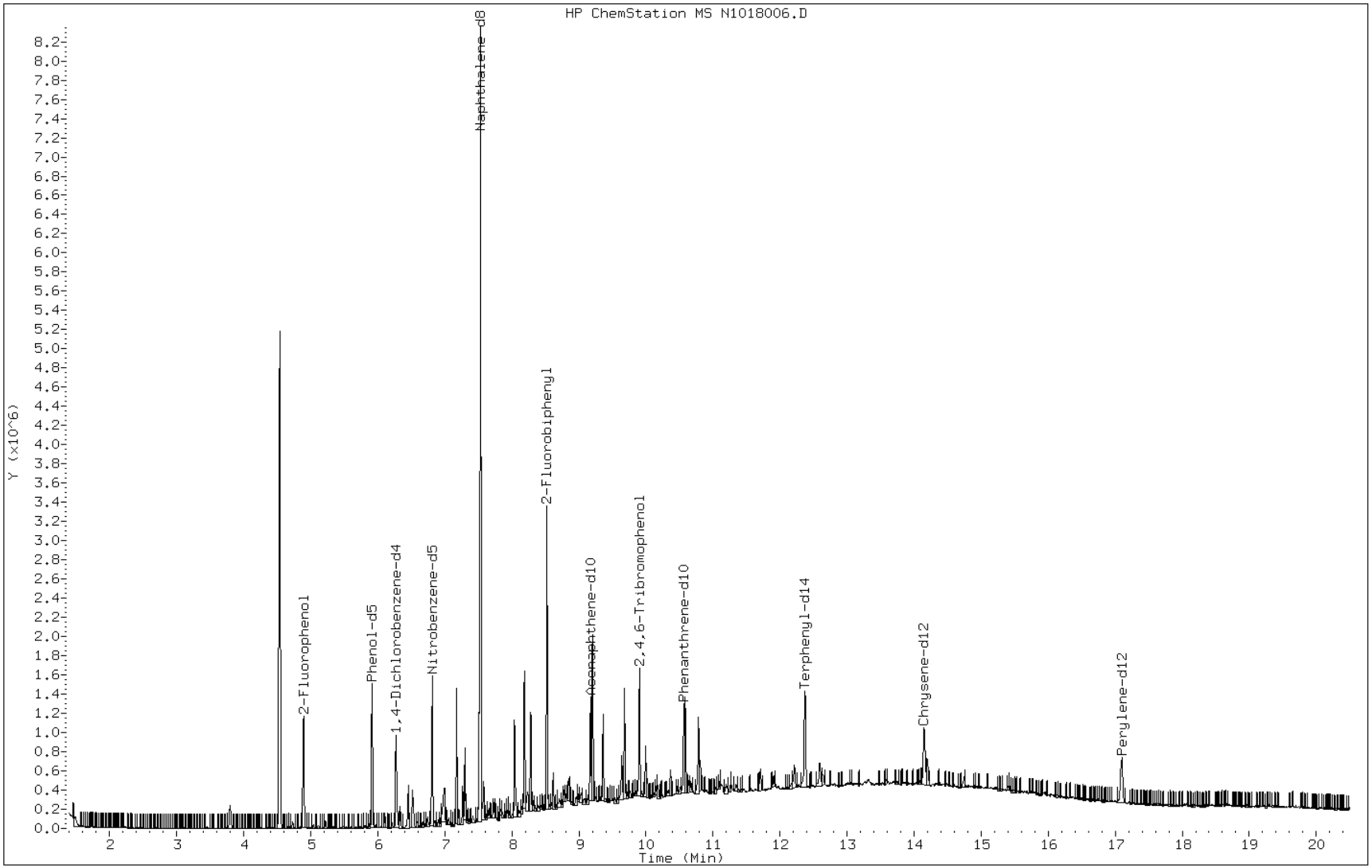
M - Compound response manually integrated.

Data File: N1018006.D

Date: 18-OCT-2013 14:58

Client ID: MB-MW-05-20131010 Instrument: 733.i

Sample Info: 180-26012-D-8-A Operator: 3200



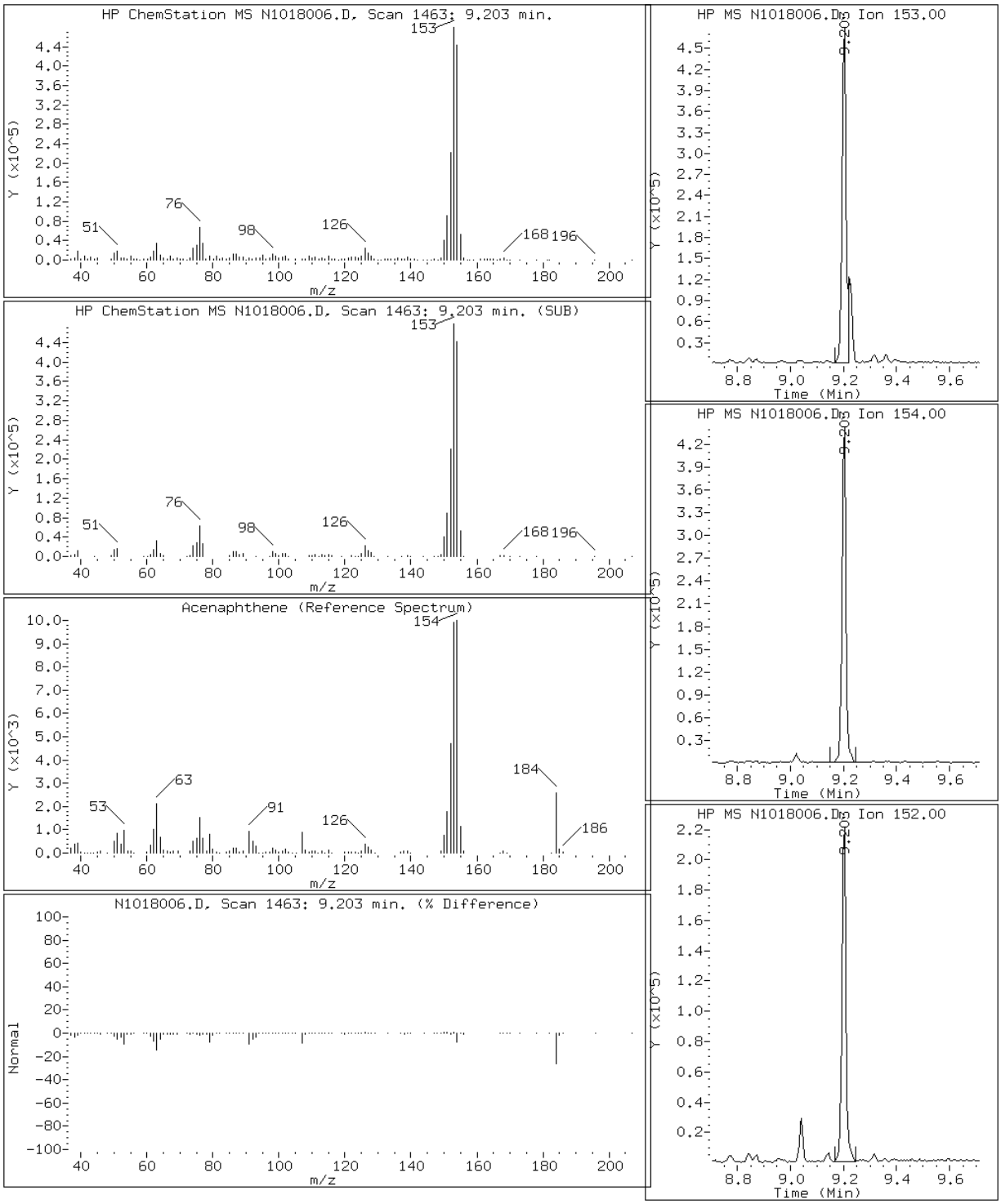
Data File: N1018006.D

Date: 18-OCT-2013 14:58

Client ID: MB-MW-05-20131010 Instrument: 733.i

Sample Info: 180-26012-D-8-A Operator: 3200

82 Acenaphthene



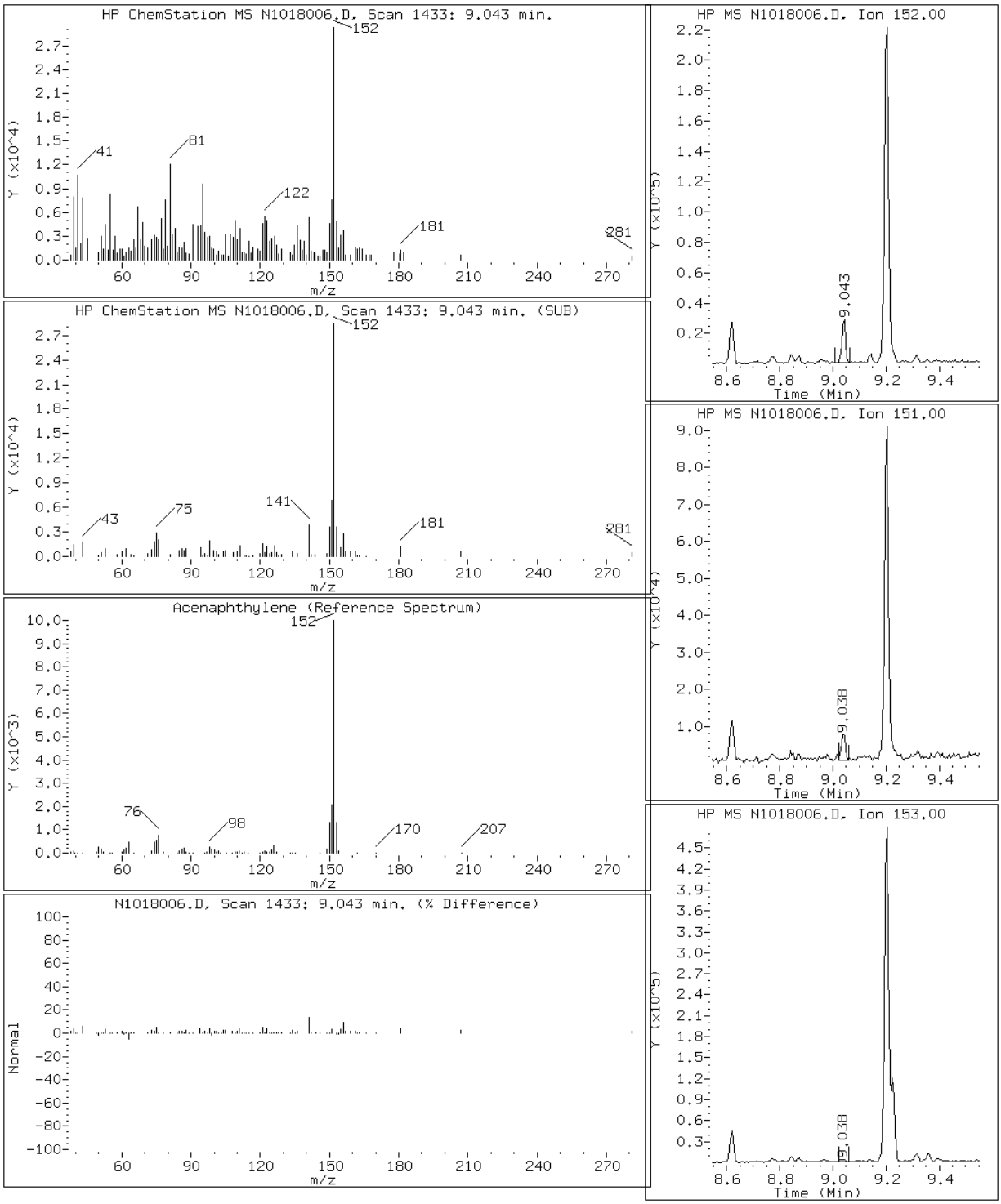
Data File: N1018006.D

Date: 18-OCT-2013 14:58

Client ID: MB-MW-05-20131010 Instrument: 733.i

Sample Info: 180-26012-D-8-A Operator: 3200

79 Acenaphthylene



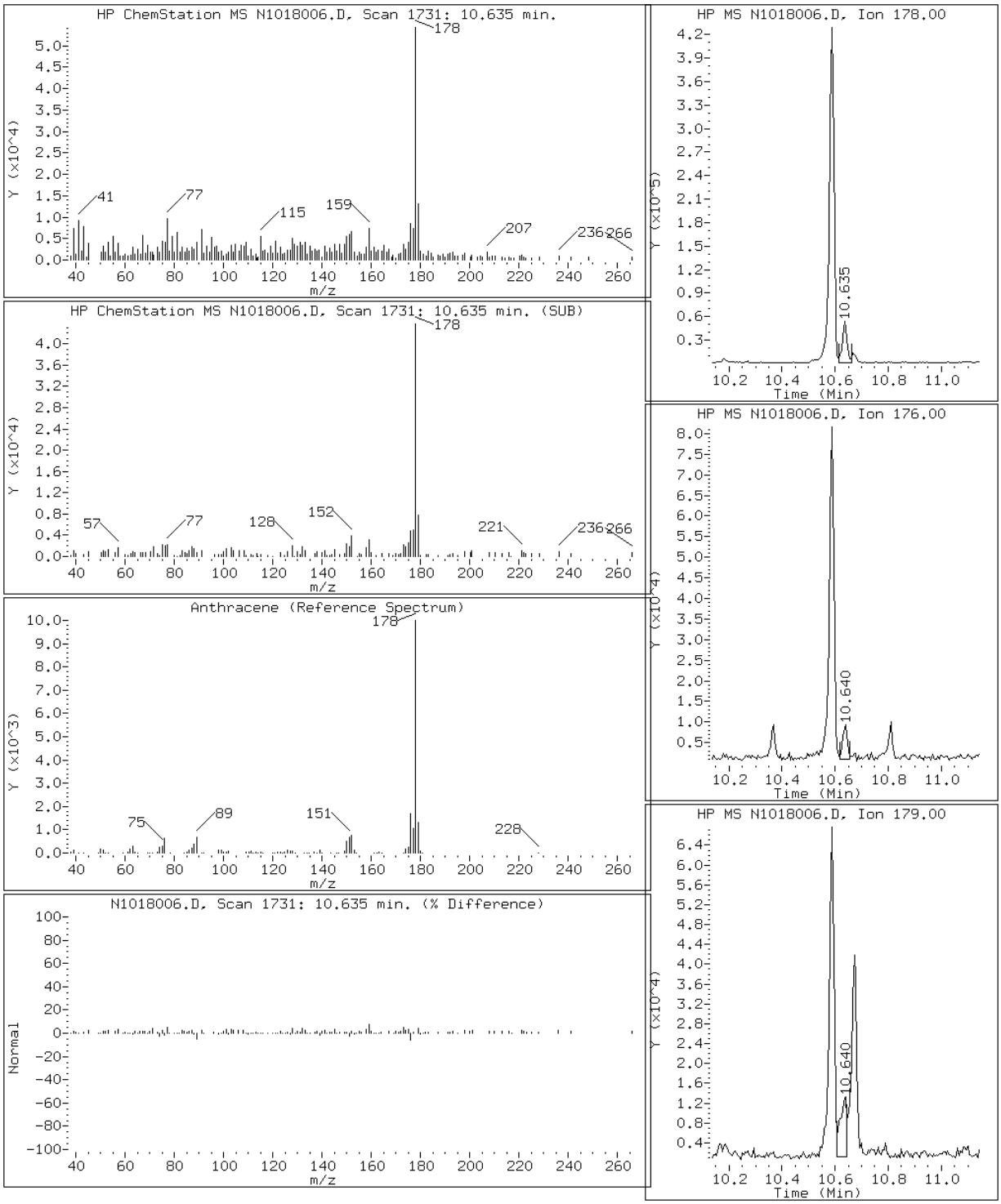
Data File: N1018006.D

Date: 18-OCT-2013 14:58

Client ID: MB-MW-05-20131010 Instrument: 733.i

Sample Info: 180-26012-D-8-A Operator: 3200

116 Anthracene



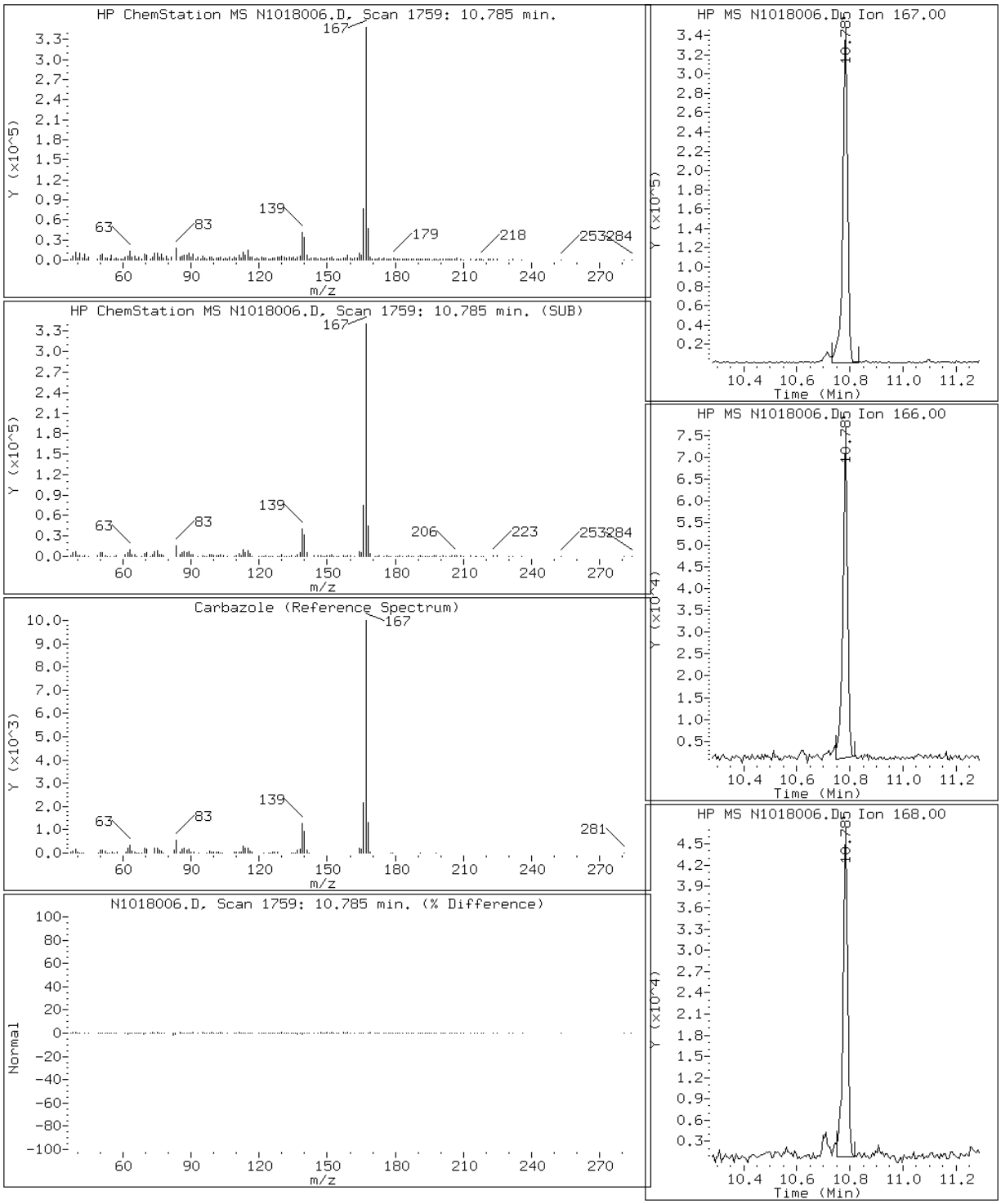
Data File: N1018006.D

Date: 18-OCT-2013 14:58

Client ID: MB-MW-05-20131010 Instrument: 733.i

Sample Info: 180-26012-D-8-A Operator: 3200

119 Carbazole



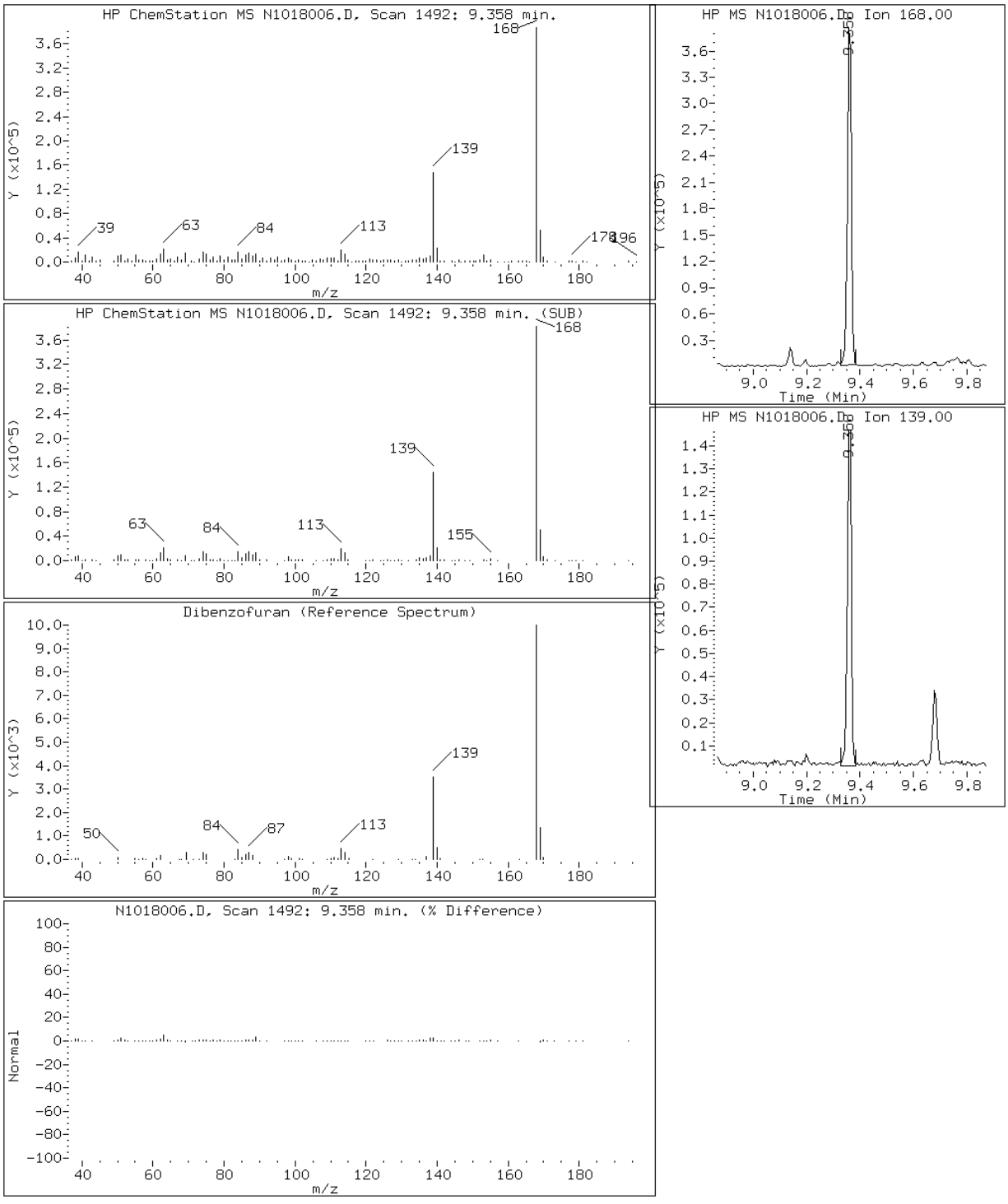
Data File: N1018006.D

Date: 18-OCT-2013 14:58

Client ID: MB-MW-05-20131010 Instrument: 733.i

Sample Info: 180-26012-D-8-A Operator: 3200

86 Dibenzofuran



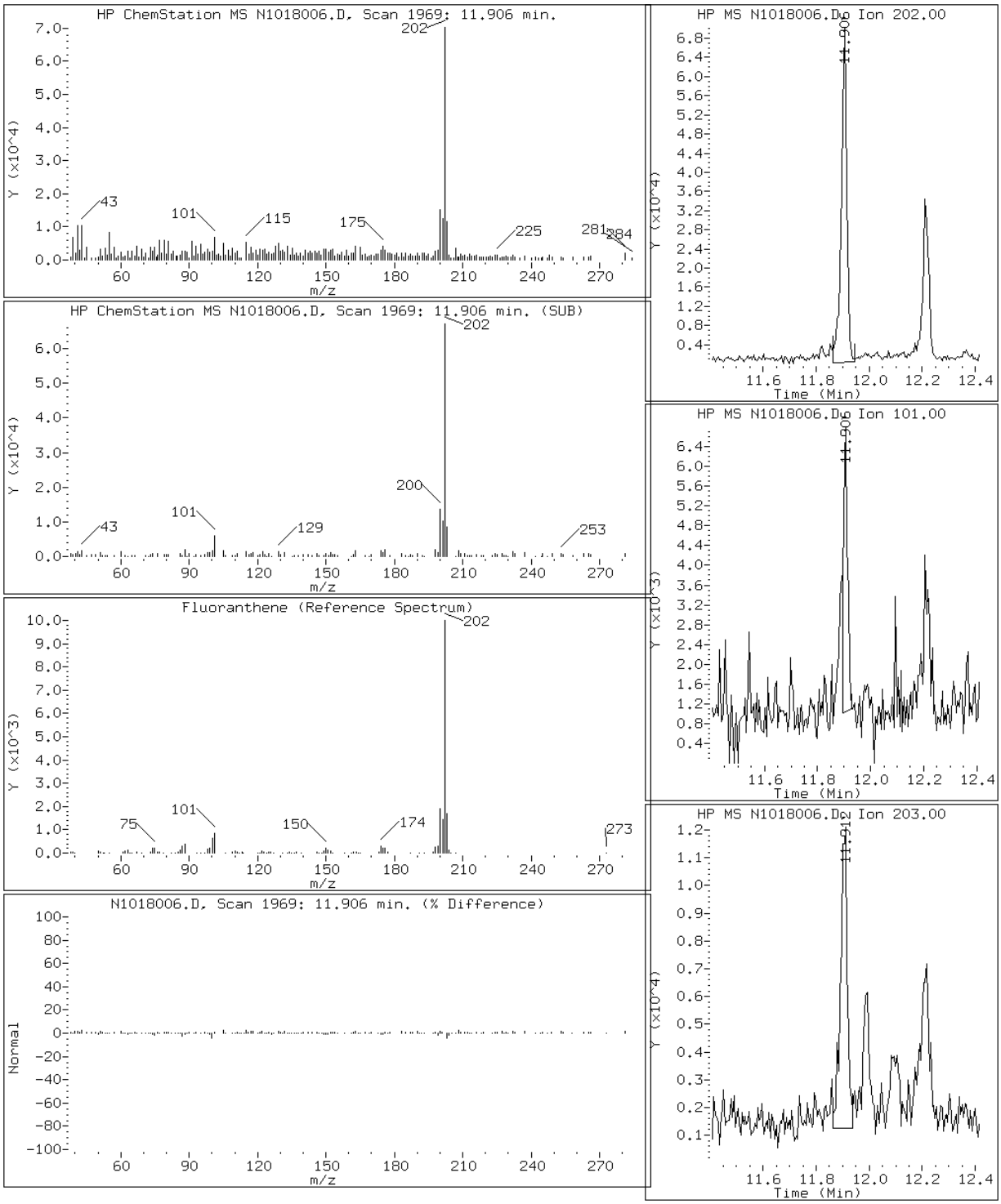
Data File: N1018006.D

Date: 18-OCT-2013 14:58

Client ID: MB-MW-05-20131010 Instrument: 733.i

Sample Info: 180-26012-D-8-A Operator: 3200

123 Fluoranthene



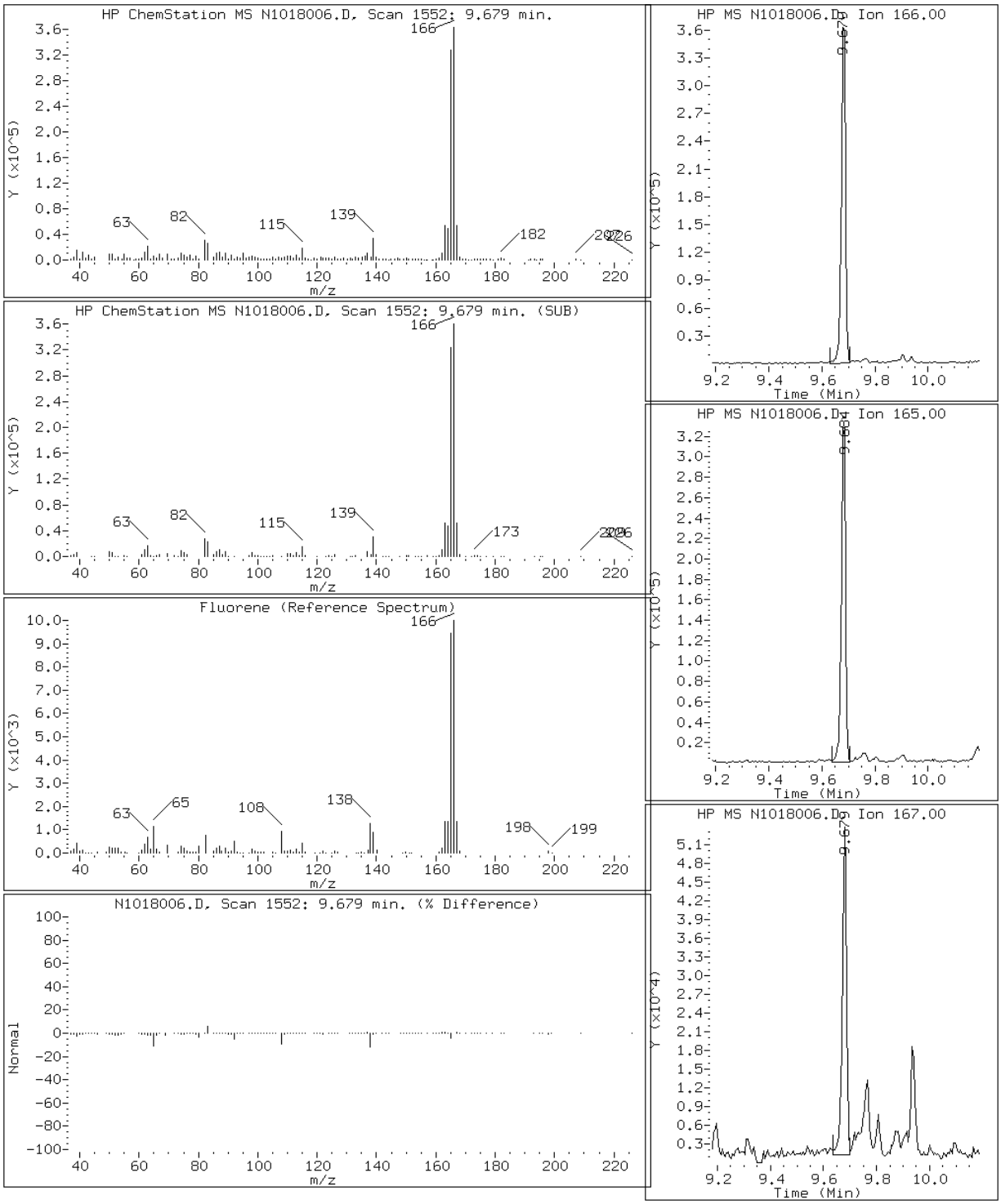
Data File: N1018006.D

Date: 18-OCT-2013 14:58

Client ID: MB-MW-05-20131010 Instrument: 733.i

Sample Info: 180-26012-D-8-A Operator: 3200

94 Fluorene



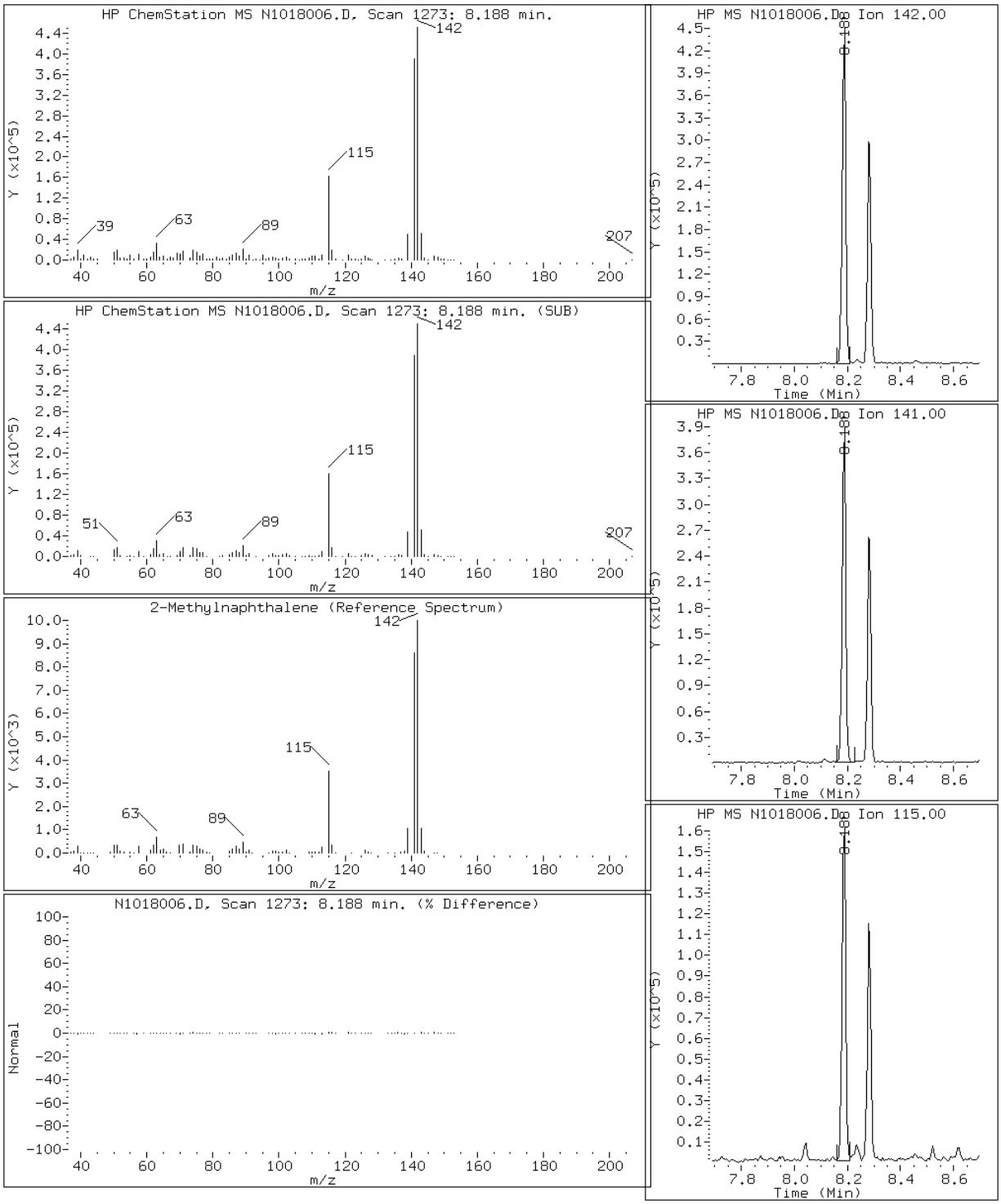
Data File: N1018006.D

Date: 18-OCT-2013 14:58

Client ID: MB-MW-05-20131010 Instrument: 733.i

Sample Info: 180-26012-D-8-A Operator: 3200

62 2-Methylnaphthalene



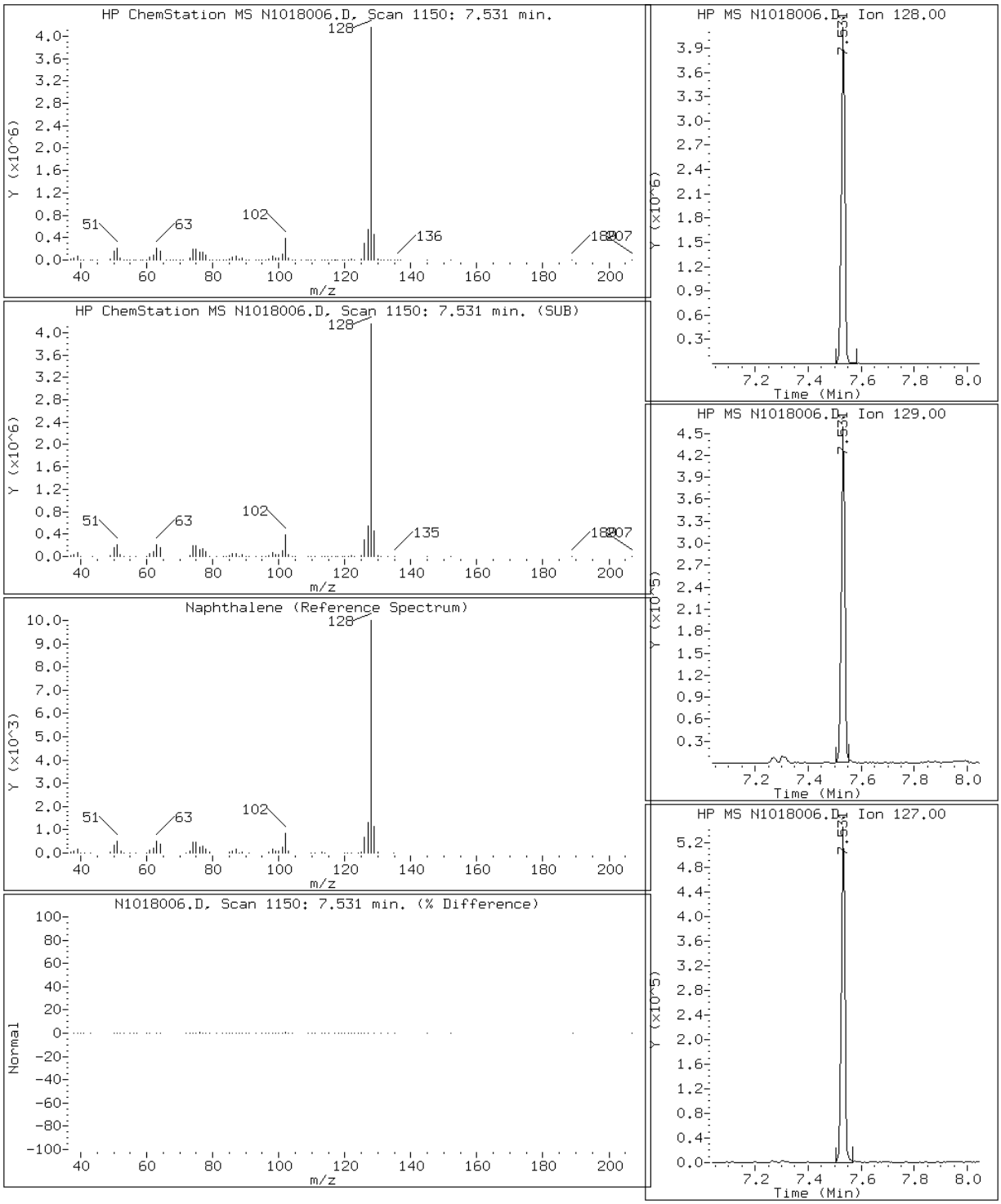
Data File: N1018006.D

Date: 18-OCT-2013 14:58

Client ID: MB-MW-05-20131010 Instrument: 733.i

Sample Info: 180-26012-D-8-A Operator: 3200

51 Naphthalene



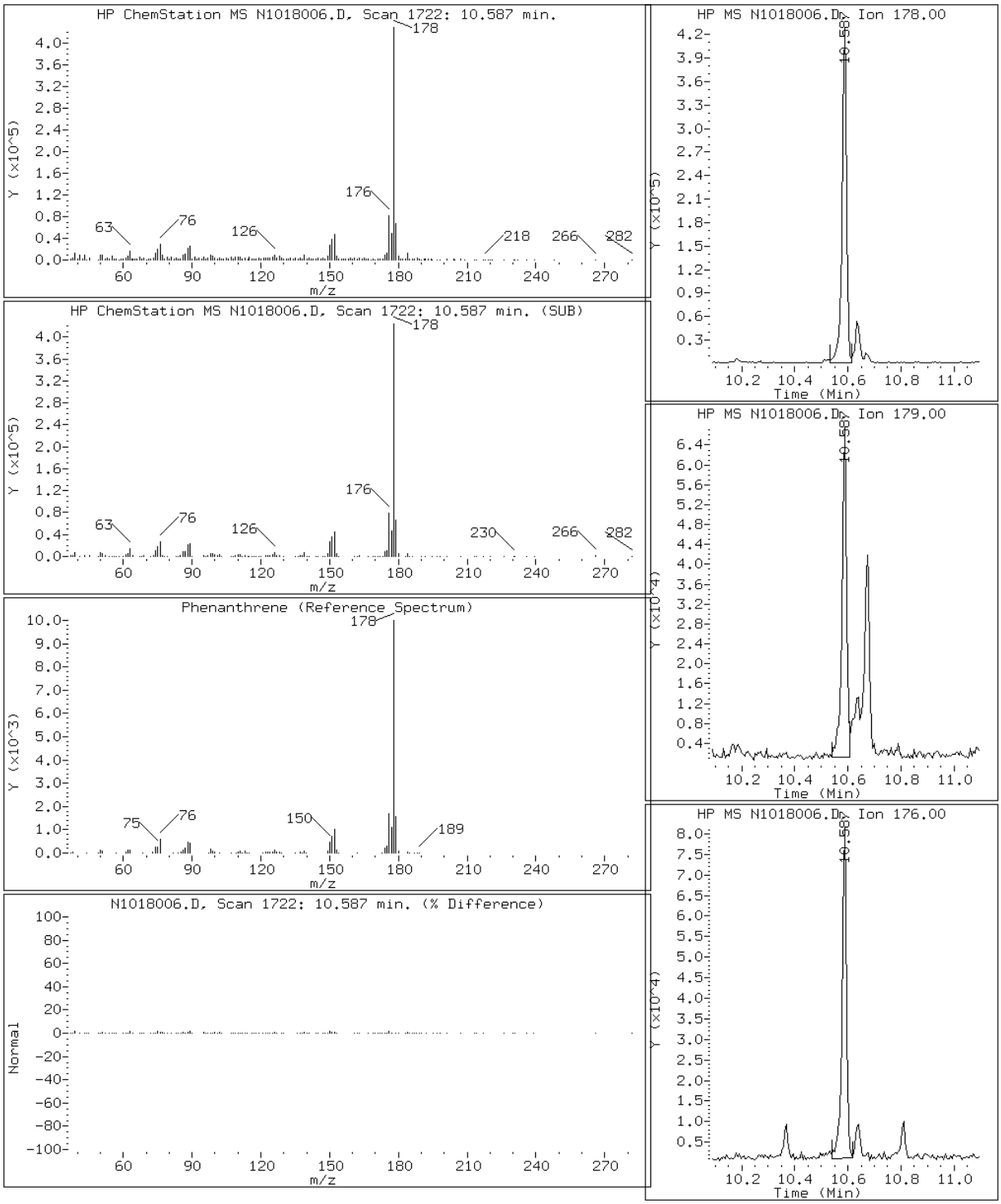
Data File: N1018006.D

Date: 18-OCT-2013 14:58

Client ID: MB-MW-05-20131010 Instrument: 733.i

Sample Info: 180-26012-D-8-A Operator: 3200

115 Phenanthrene



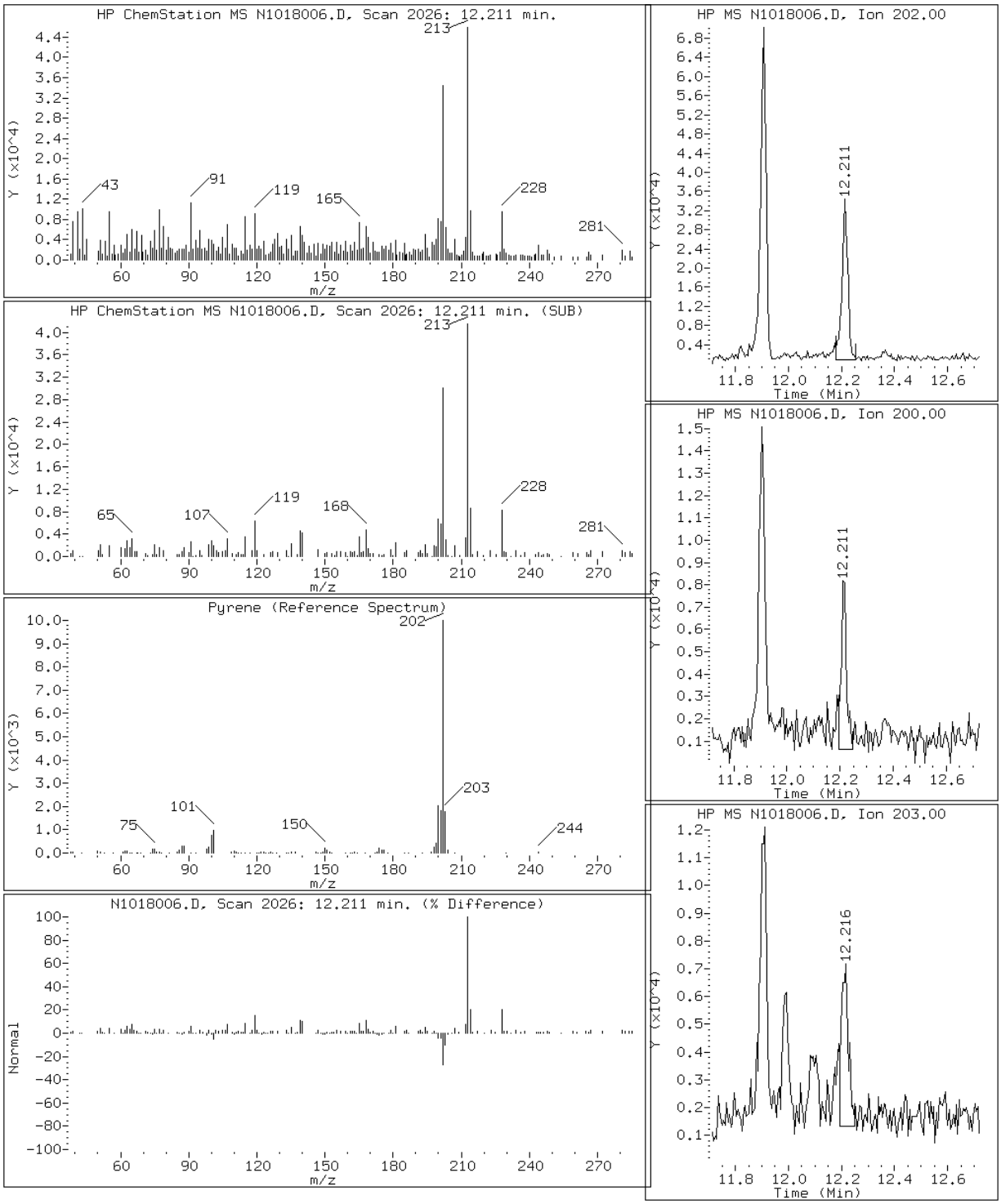
Data File: N1018006.D

Date: 18-OCT-2013 14:58

Client ID: MB-MW-05-20131010 Instrument: 733.i

Sample Info: 180-26012-D-8-A Operator: 3200

125 Pyrene



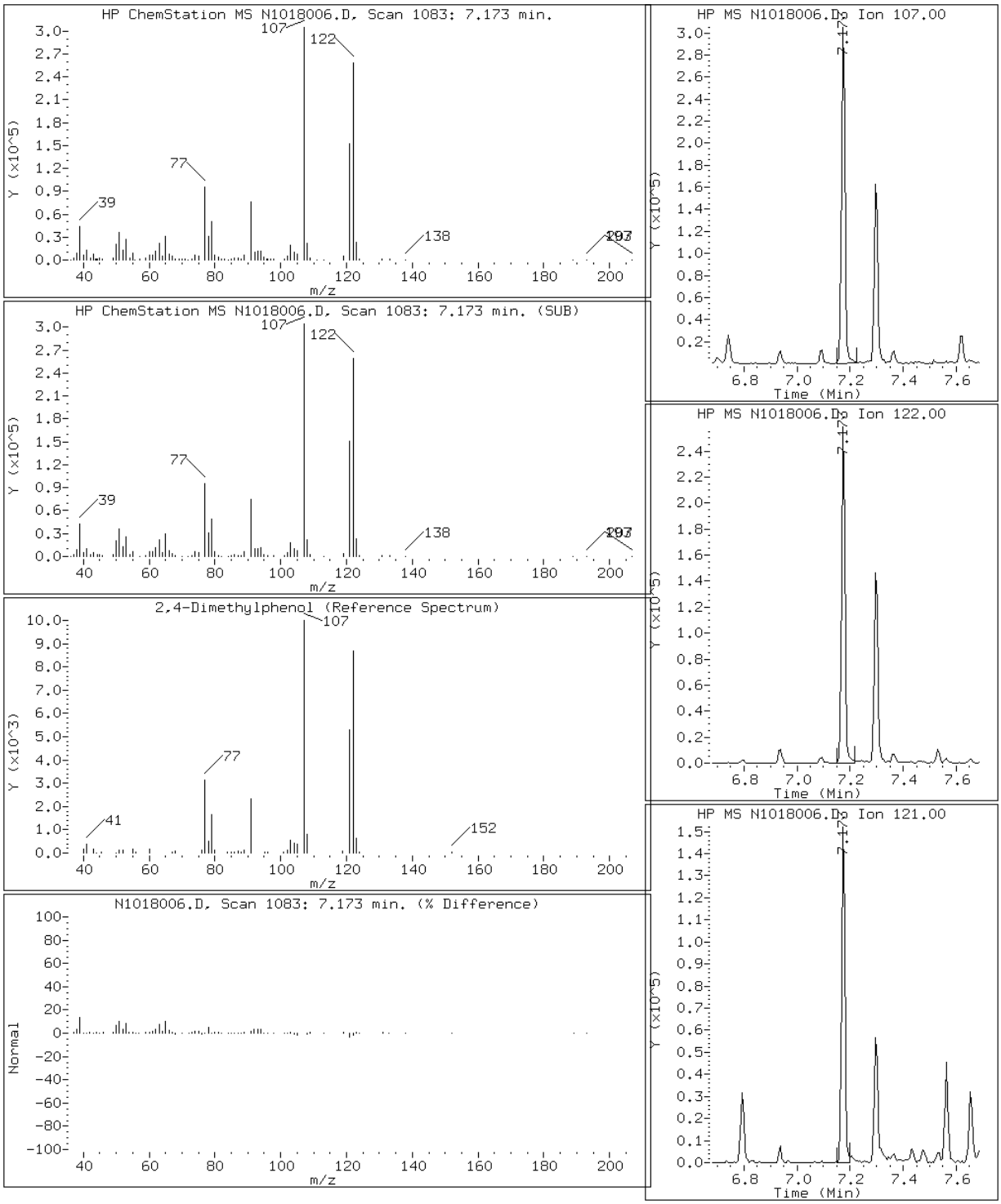
Data File: N1018006.D

Date: 18-OCT-2013 14:58

Client ID: MB-MW-05-20131010 Instrument: 733.i

Sample Info: 180-26012-D-8-A Operator: 3200

43 2,4-Dimethylphenol



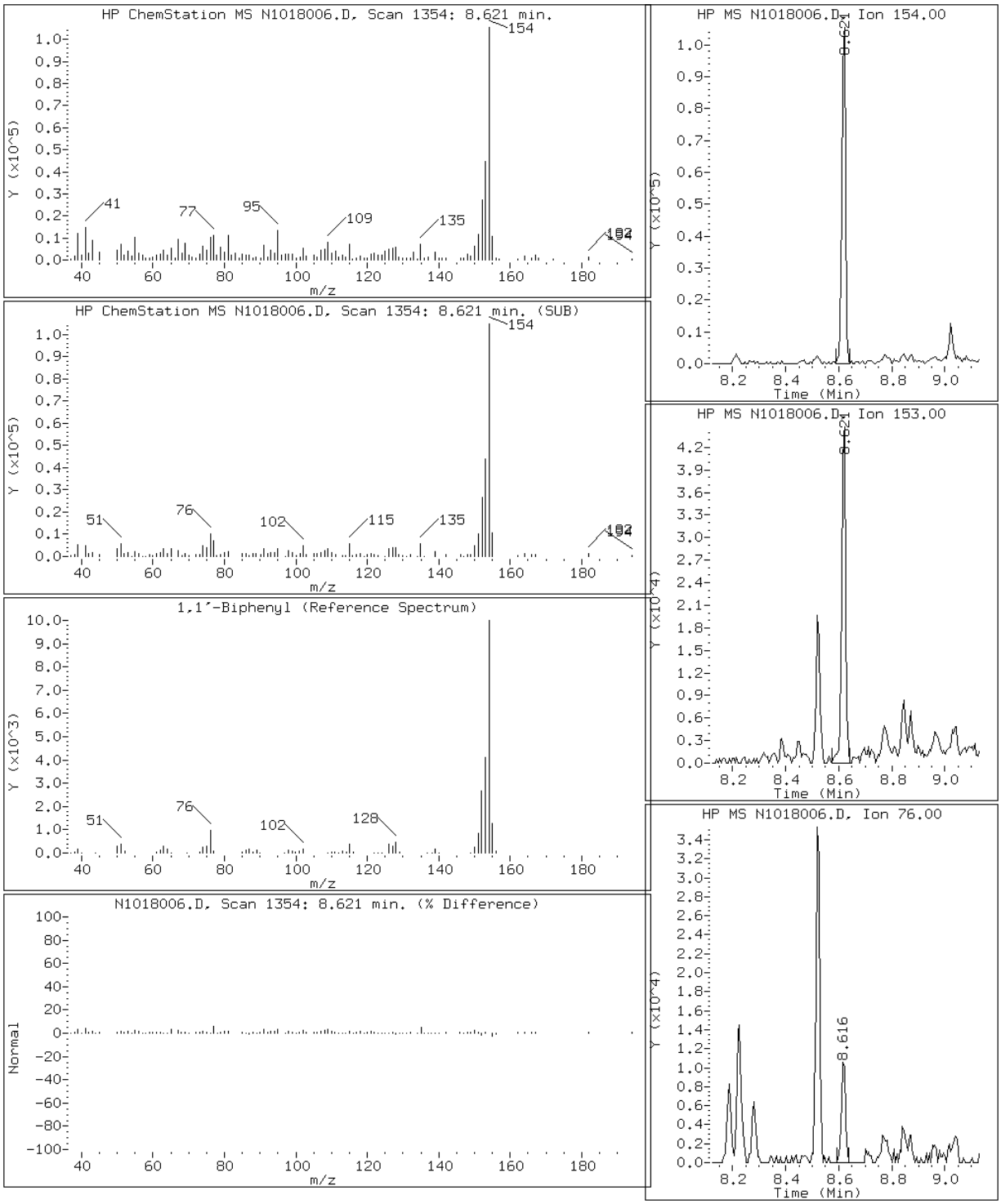
Data File: N1018006.D

Date: 18-OCT-2013 14:58

Client ID: MB-MW-05-20131010 Instrument: 733.i

Sample Info: 180-26012-D-8-A Operator: 3200

209 1,1'-Biphenyl



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-EB-20131010 | Lab Sample ID: 180-26012-9

Matrix: Water | Lab File ID: N1018007.D

Analysis Method: 8270D | Date Collected: 10/10/2013 09:00

Extract. Method: 3520C | Date Extracted: 10/17/2013 06:31

Sample wt/vol: 1040(mL) | Date Analyzed: 10/18/2013 15:24

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87196 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND		1.9	0.14
208-96-8	Acenaphthylene	ND		1.9	0.15
120-12-7	Anthracene	ND		1.9	0.15
56-55-3	Benzo[a]anthracene	ND		1.9	0.14
50-32-8	Benzo[a]pyrene	ND		1.9	0.13
205-99-2	Benzo[b]fluoranthene	ND		1.9	0.15
191-24-2	Benzo[g,h,i]perylene	ND		1.9	0.15
207-08-9	Benzo[k]fluoranthene	ND		1.9	0.53
117-81-7	Bis(2-ethylhexyl) phthalate	ND		19	12
108-60-1	2,2'-oxybis[1-chloropropane]	ND		1.9	0.19
101-55-3	4-Bromophenyl phenyl ether	ND		9.6	0.61
85-68-7	Butyl benzyl phthalate	ND		9.6	1.4
86-74-8	Carbazole	ND		1.9	0.15
106-47-8	4-Chloroaniline	ND		9.6	0.85
91-58-7	2-Chloronaphthalene	ND		1.9	0.15
7005-72-3	4-Chlorophenyl phenyl ether	ND		9.6	0.48
218-01-9	Chrysene	ND		1.9	0.13
53-70-3	Dibenz(a,h)anthracene	ND		1.9	0.15
132-64-9	Dibenzofuran	ND		9.6	0.59
84-74-2	Di-n-butyl phthalate	ND		9.6	1.2
91-94-1	3,3'-Dichlorobenzidine	ND		9.6	1.1
84-66-2	Diethyl phthalate	ND		9.6	1.4
131-11-3	Dimethyl phthalate	ND		9.6	0.74
121-14-2	2,4-Dinitrotoluene	ND		9.6	0.52
606-20-2	2,6-Dinitrotoluene	ND		9.6	0.77
117-84-0	Di-n-octyl phthalate	ND		9.6	2.0
206-44-0	Fluoranthene	ND		1.9	0.16
86-73-7	Fluorene	ND		1.9	0.21
118-74-1	Hexachlorobenzene	ND		1.9	0.18
87-68-3	Hexachlorobutadiene	ND		1.9	0.16
77-47-4	Hexachlorocyclopentadiene	ND		9.6	0.50
67-72-1	Hexachloroethane	ND		9.6	0.60
193-39-5	Indeno[1,2,3-cd]pyrene	ND		1.9	0.19
78-59-1	Isophorone	ND		9.6	0.62

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-EB-20131010 | Lab Sample ID: 180-26012-9

Matrix: Water | Lab File ID: N1018007.D

Analysis Method: 8270D | Date Collected: 10/10/2013 09:00

Extract. Method: 3520C | Date Extracted: 10/17/2013 06:31

Sample wt/vol: 1040(mL) | Date Analyzed: 10/18/2013 15:24

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87196 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
91-57-6	2-Methylnaphthalene	ND		1.9	0.12
91-20-3	Naphthalene	ND		1.9	0.13
88-74-4	2-Nitroaniline	ND		48	3.4
99-09-2	3-Nitroaniline	ND		48	3.1
100-01-6	4-Nitroaniline	ND		48	1.7
100-02-7	4-Nitrophenol	ND		48	6.2
98-95-3	Nitrobenzene	ND		19	0.81
621-64-7	N-Nitrosodi-n-propylamine	ND		1.9	0.30
86-30-6	N-Nitrosodiphenylamine	ND		9.6	0.82
85-01-8	Phenanthrene	ND		1.9	0.41
129-00-0	Pyrene	ND		1.9	0.15
59-50-7	4-Chloro-3-methylphenol	ND		9.6	0.73
95-57-8	2-Chlorophenol	ND		9.6	1.6
95-48-7	2-Methylphenol	ND		9.6	0.83
106-44-5	Methylphenol, 3 & 4	ND		9.6	0.87
120-83-2	2,4-Dichlorophenol	ND		1.9	0.32
105-67-9	2,4-Dimethylphenol	ND		9.6	0.82
51-28-5	2,4-Dinitrophenol	ND		48	5.9
534-52-1	4,6-Dinitro-2-methylphenol	ND		48	2.1
88-75-5	2-Nitrophenol	ND		9.6	1.6
87-86-5	Pentachlorophenol	ND		9.6	0.64
108-95-2	Phenol	ND		1.9	0.56
95-95-4	2,4,5-Trichlorophenol	ND		9.6	1.5
88-06-2	2,4,6-Trichlorophenol	ND		9.6	1.7
98-86-2	Acetophenone	ND		9.6	0.77
1912-24-9	Atrazine	ND		9.6	0.86
100-52-7	Benzaldehyde	ND		9.6	1.4
92-52-4	1,1'-Biphenyl	ND		9.6	0.40
105-60-2	Caprolactam	ND		48	11
111-91-1	Bis(2-chloroethoxy)methane	ND		9.6	0.56
111-44-4	Bis(2-chloroethyl)ether	ND		1.9	0.24

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-EB-20131010 | Lab Sample ID: 180-26012-9

Matrix: Water | Lab File ID: N1018007.D

Analysis Method: 8270D | Date Collected: 10/10/2013 09:00

Extract. Method: 3520C | Date Extracted: 10/17/2013 06:31

Sample wt/vol: 1040(mL) | Date Analyzed: 10/18/2013 15:24

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87196 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	59		37-104
4165-62-2	Phenol-d5 (Surr)	52		30-102
321-60-8	2-Fluorobiphenyl	59		35-108
118-79-6	2,4,6-Tribromophenol (Surr)	68		33-122
367-12-4	2-Fluorophenol (Surr)	52		26-100
1718-51-0	Terphenyl-d14 (Surr)	75		25-130

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN101813D.b\N1018007.D
Lab Smp Id: 180-26012-C-9-A Client Smp ID: MB-EB-20131010
Inj Date : 18-OCT-2013 15:24
Operator : 3200 Inst ID: 733.i
Smp Info : 180-26012-C-9-A
Misc Info : 180-26012-C-9-A
Comment :
Method : \\PITSVR06\D\chem\733.i\TN101813D.b\T8270d.m
Meth Date : 19-Oct-2013 05:41 733.i Quant Type: ISTD
Cal Date : 09-OCT-2013 08:22 Cal File: N1009IC8.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: padepi.sub
Target Version: 4.14
Processing Host: PITPC-502

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
* 1	1,4-Dichlorobenzene-d4	152	6.268	6.275	(1.000)	162354	8.00000	
* 2	Naphthalene-d8	136	7.502	7.520	(1.000)	584925	8.00000	
* 3	Acenaphthene-d10	164	9.164	9.176	(1.000)	348428	8.00000	
* 4	Phenanthrene-d10	188	10.558	10.565	(1.000)	586958	8.00000	
* 5	Chrysene-d12	240	14.137	14.160	(1.000)	567591	8.00000	
* 6	Perylene-d12	264	17.081	17.120	(1.000)	443832	8.00000	
198	1,4-Dioxane	88	Compound Not Detected.					
10	N-Nitrosodimethylamine	74	Compound Not Detected.					
9	Pyridine	79	Compound Not Detected.					
16	Methyl methanesulfonate	80	Compound Not Detected.					
206	Benzaldehyde	77	Compound Not Detected.					
21	Aniline	93	Compound Not Detected.					
22	Phenol	94	Compound Not Detected.					
23	bis(2-Chloroethyl)ether	93	Compound Not Detected.					
24	2-Chlorophenol	128	Compound Not Detected.					
26	1,3-Dichlorobenzene	146	Compound Not Detected.					
27	1,4-Dichlorobenzene	146	Compound Not Detected.					
28	1,2-Dichlorobenzene	146	Compound Not Detected.					
217	Indene	116	Compound Not Detected.					
29	Benzyl Alcohol	108	Compound Not Detected.					
30	2-Methylphenol	108	Compound Not Detected.					
31	2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
37	Acetophenone	105	Compound Not Detected.					
32	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
192	4-Methylphenol	108	Compound Not Detected.					
34	Hexachloroethane	117	Compound Not Detected.					
35	Nitrobenzene	77	Compound Not Detected.					
36	N-Nitrosopyrrolidine	100	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
41	Isophorone	82	Compound Not Detected.					
42	2-Nitrophenol	139	Compound Not Detected.					
43	2,4-Dimethylphenol	107	Compound Not Detected.					
44	bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
48	2,4-Dichlorophenol	162	Compound Not Detected.					
49	Benzoic Acid	122	Compound Not Detected.					
50	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
51	Naphthalene	128	Compound Not Detected.					
52	4-Chloroaniline	127	Compound Not Detected.					
54	2,6-Dichlorophenol	162	Compound Not Detected.					
56	Hexachlorobutadiene	224	Compound Not Detected.					
208	Caprolactam	113	Compound Not Detected.					
59	4-Chloro-3-Methylphenol	107	Compound Not Detected.					
62	2-Methylnaphthalene	142	Compound Not Detected.					
63	1-Methylnaphthalene	142	Compound Not Detected.					
64	Hexachlorocyclopentadiene	236	Compound Not Detected.					
65	1,2,4,5-Tetrachlorobenzene	215	Compound Not Detected.					
66	2,4,6-Trichlorophenol	196	Compound Not Detected.					
67	2,4,5-Trichlorophenol	196	Compound Not Detected.					
209	1,1'-Biphenyl	154	Compound Not Detected.					
70	2-Chloronaphthalene	162	Compound Not Detected.					
73	2-Nitroaniline	65	Compound Not Detected.					
76	Dimethylphthalate	163	Compound Not Detected.					
78	2,6-Dinitrotoluene	165	Compound Not Detected.					
79	Acenaphthylene	152	Compound Not Detected.					
81	3-Nitroaniline	138	Compound Not Detected.					
82	Acenaphthene	153	Compound Not Detected.					
83	2,4-Dinitrophenol	184	Compound Not Detected.					
85	4-Nitrophenol	109	Compound Not Detected.					
86	Dibenzofuran	168	Compound Not Detected.					
87	2,4-Dinitrotoluene	165	Compound Not Detected.					
91	2,3,5,6-Tetrachlorophenol	231	Compound Not Detected.					
88	2,3,4,6-Tetrachlorophenol	231	Compound Not Detected.					
92	2-Naphthylamine	143	Compound Not Detected.					
93	Diethylphthalate	149	Compound Not Detected.					
94	Fluorene	166	Compound Not Detected.					
95	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
96	4-Nitroaniline	138	Compound Not Detected.					
98	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
99	N-Nitrosodiphenylamine (1)	169	Compound Not Detected.					
100	1,2-Diphenylhydrazine	77	Compound Not Detected.					
106	4-Bromophenyl-phenylether	248	Compound Not Detected.					
107	Hexachlorobenzene	283	Compound Not Detected.					
210	Atrazine	200	Compound Not Detected.					
111	Pentachlorophenol	265	Compound Not Detected.					
115	Phenanthrene	178	Compound Not Detected.					
116	Anthracene	178	Compound Not Detected.					
119	Carbazole	167	Compound Not Detected.					
120	Di-n-Butylphthalate	149	Compound Not Detected.					
123	Fluoranthene	202	Compound Not Detected.					
124	Benzidine	184	Compound Not Detected.					
125	Pyrene	202	Compound Not Detected.					
131	Butylbenzylphthalate	149	Compound Not Detected.					
135	3,3'-Dichlorobenzidine	252	Compound Not Detected.					

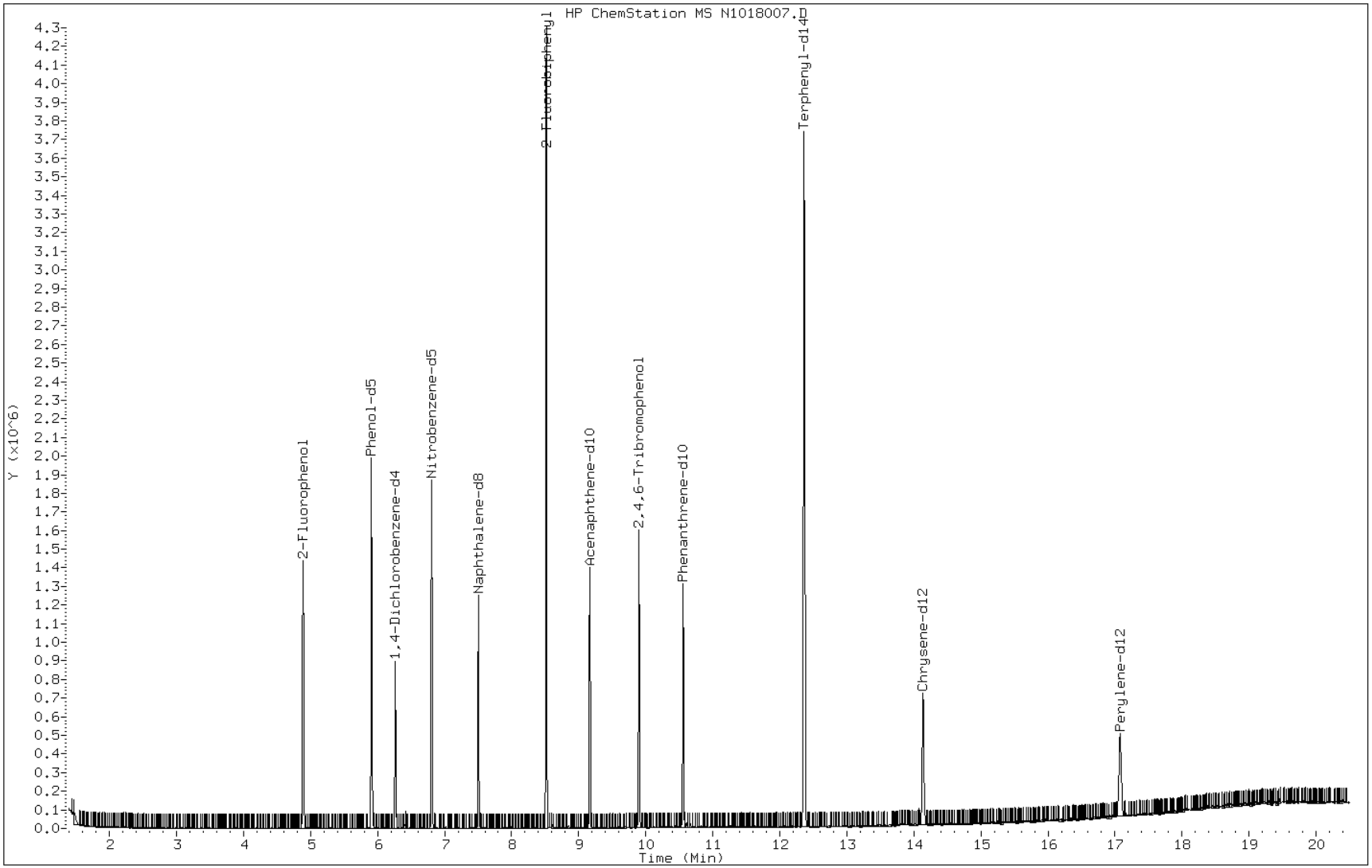
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
136 Benzo(a)Anthracene	228	Compound Not Detected.					
137 Chrysene	228	Compound Not Detected.					
139 bis(2-ethylhexyl)Phthalate	149	14.068	14.096	(0.995)	9812	0.24005	0.24005
140 Di-n-octylphthalate	149	Compound Not Detected.					
141 Benzo(b)fluoranthene	252	Compound Not Detected.					
142 Benzo(k)fluoranthene	252	Compound Not Detected.					
143 7,12-dimethylbenz[a]anthracen	256	Compound Not Detected.					
146 Benzo(a)pyrene	252	Compound Not Detected.					
149 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
150 Dibenz(a,h)anthracene	278	Compound Not Detected.					
151 Benzo(g,h,i)perylene	276	Compound Not Detected.					
$ 154 Nitrobenzene-d5	82	6.808	6.820	(0.907)	613546	23.4237	23.424
$ 155 2-Fluorobiphenyl	172	8.517	8.530	(0.929)	1518139	23.4967	23.497
$ 156 Terphenyl-d14	244	12.363	12.376	(0.875)	2012199	29.9603	29.960
$ 157 Phenol-d5	99	5.910	5.923	(0.943)	622259	20.9636	20.964
$ 158 2-Fluorophenol	112	4.885	4.892	(0.779)	526739	20.8497	20.850
$ 159 2,4,6-Tribromophenol	330	9.901	9.913	(0.938)	176214	27.3193	27.319

Data File: N1018007.D

Date: 18-OCT-2013 15:24

Client ID: MB-EB-20131010 Instrument: 733.i

Sample Info: 180-26012-C-9-A Operator: 3200



FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86218

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2013 05:24 Calibration End Date: 10/09/2013 08:22 Calibration ID: 11737

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86218/2	N1009IC1.D
Level 2	IC 180-86218/3	N1009IC2.D
Level 3	IC 180-86218/4	N1009IC3.D
Level 4	ICIS 180-86218/5	N1009IC4.D
Level 5	IC 180-86218/6	N1009IC5.D
Level 6	IC 180-86218/9	N1009IC8.D
Level 7	IC 180-86218/7	N1009IC6.D
Level 8	IC 180-86218/8	N1009IC7.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	0.5560 0.5023	0.5312 0.5102	0.5344 0.5136	0.4992	0.5175	Ave		0.5205			0.0100	3.6		20.0			
N-Nitrosodimethylamine	0.5685 0.6726	0.6211 0.6662	0.6341 0.6777	0.6631	0.6773	Ave		0.6476			0.0100	5.9		20.0			
Pyridine	+++++ 1.2213	1.1681 1.0104	1.2339 1.1342	1.2332	1.2601	Ave		1.1802			0.0100	7.3		20.0			
Methyl methanesulfonate	0.8261 0.7181	0.7279 0.6989	0.8010 0.6805	0.7725	0.7498	Ave		0.7469			0.0100	6.7		20.0			
Benzaldehyde	1.1302 0.9495	0.9287 0.9044	1.0222 0.8330	1.0069	1.0101	Ave		0.9731			0.0100	9.2		20.0			
Phenol	1.9473 1.6504	1.5763 1.6476	1.5642 1.6570	1.6385	1.6210	Ave		1.6628			0.8000	7.2		20.0			
Aniline	1.8215 1.7899	1.6873 1.6641	1.7683 1.6826	1.8107	1.7893	Ave		1.7517			0.0100	3.6		20.0			
Bis(2-chloroethyl)ether	1.0739 1.0486	1.0346 1.0698	1.0849 1.0578	1.0294	1.0488	Ave		1.0560			0.7000	1.8		20.0			
2-Chlorophenol	1.3561 1.3043	1.3160 1.3130	1.2728 1.3373	1.2683	1.3128	Ave		1.3101			0.8000	2.2		20.0			
n-Decane	0.9872 0.9977	0.9641 0.9870	1.0345 1.0090	0.9701	0.9851	Ave		0.9918				2.2					
1,3-Dichlorobenzene	1.5013 1.6006	1.5221 1.5905	1.5803 1.6187	1.5889	1.5846	Ave		1.5734			0.0100	2.6		20.0			
1,4-Dichlorobenzene	1.7256 1.5864	1.5775 1.6215	1.6088 1.6236	1.5576	1.5838	Ave		1.6106			0.0100	3.2		20.0			
Benzyl alcohol	0.7325 0.7504	0.6730 0.7517	0.6920 0.7601	0.7201	0.7466	Ave		0.7283			0.0100	4.3		20.0			
1,2-Dichlorobenzene	1.6285 1.4913	1.4582 1.5040	1.4983 1.5159	1.4622	1.4882	Ave		1.5058			0.0100	3.5		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86218

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2013 05:24 Calibration End Date: 10/09/2013 08:22 Calibration ID: 11737

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Methylphenol	1.1941 1.1090	1.0480 1.1323	1.0413 1.1406	1.0539	1.0801	Ave		1.0999			0.7000	4.9		20.0			
Indene	2.2212 2.2790	2.0313 2.3330	2.1595 2.4154	2.1194	2.1826	Ave		2.2177			0.0100	5.5		20.0			
2,2'-oxybis[1-chloropropane]	1.2490 1.1406	1.1360 1.1500	1.1499 1.1341	1.1167	1.1507	Ave		1.1534			0.0100	3.5		20.0			
N-Nitrosopyrrolidine	0.5193 0.4893	0.4362 0.4613	0.4635 0.4869	0.4726	0.4938	Ave		0.4779			0.0100	5.3		20.0			
Acetophenone	2.4176 1.7087	1.7162 1.7232	1.7143 1.7465	1.6710	1.6732	Ave		1.7963			0.0100	14.0		20.0			
N-Nitrosodi-n-propylamine	0.8087 0.8008	0.7512 0.8016	0.8225 0.8348	0.7846	0.8109	Ave		0.8019			0.5000	3.2		20.0			
Methylphenol, 3 & 4	1.1805 1.1949	1.0273 1.2044	1.1088 1.2487	1.1195	1.1395	Ave		1.1530			0.6000	6.0		20.0			
Hexachloroethane	0.6629 0.5971	0.5703 0.6106	0.5948 0.6099	0.5921	0.5893	Ave		0.6034			0.3000	4.5		20.0			
Nitrobenzene	0.3724 0.3628	0.3584 0.3610	0.3514 0.3688	0.3436	0.3643	Ave		0.3603			0.2000	2.6		20.0			
Isophorone	0.5353 0.5977	0.5550 0.6095	0.5685 0.6202	0.5582	0.5821	Ave		0.5783			0.4000	5.1		20.0			
2-Nitrophenol	0.1895 0.2052	0.1701 0.2145	0.1794 0.2142	0.1934	0.2017	Ave		0.1960			0.1000	8.1		20.0			
2,4-Dimethylphenol	0.3348 0.3349	0.2828 0.3529	0.2740 0.3582	0.2863	0.3039	Ave		0.3160			0.2000	10.5		20.0			
Bis(2-chloroethoxy)methane	0.3416 0.3717	0.3541 0.3774	0.3482 0.3818	0.3367	0.3637	Ave		0.3594			0.3000	4.7		20.0			
Benzoic acid	+++++ 0.1801	+++++ 0.1807	0.0892 0.1909	0.1256	0.1673	Qua	0.5758	5.5258	-0.109		0.0100			20.0	0.9994		0.9900
2,4-Dichlorophenol	0.3209 0.3305	0.3044 0.3424	0.3168 0.3439	0.3170	0.3319	Ave		0.3260			0.2000	4.2		20.0			
1,2,4-Trichlorobenzene	0.3728 0.3978	0.3976 0.4105	0.4093 0.4124	0.3814	0.4031	Ave		0.3981			0.0100	3.6		20.0			
Naphthalene	1.1072 1.0649	1.0222 1.1119	1.0067 1.1296	0.9910	1.0566	Ave		1.0613			0.7000	4.9		20.0			
4-Chloroaniline	0.4095 0.4280	0.3999 0.4467	0.4250 0.4507	0.4130	0.4356	Ave		0.4260			0.0100	4.2		20.0			
2,6-Dichlorophenol	0.3072 0.3186	0.2948 0.3318	0.3028 0.3339	0.3038	0.3193	Ave		0.3140			0.0100	4.5		20.0			
Hexachlorobutadiene	0.2626 0.2685	0.2789 0.2782	0.2583 0.2763	0.2549	0.2680	Ave		0.2682			0.0100	3.4		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86218

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2013 05:24 Calibration End Date: 10/09/2013 08:22 Calibration ID: 11737

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Caprolactam	+++++ 0.0814	0.0738 0.0832	0.0630 0.0837	0.0739	0.0752	Ave		0.0763			0.0100	9.5		20.0			
4-Chloro-3-methylphenol	0.2953 0.2880	0.2614 0.2980	0.2817 0.3037	0.2814	0.2935	Ave		0.2879			0.2000	4.6		20.0			
2-Methylnaphthalene	0.7388 0.7564	0.6982 0.7748	0.7084 0.7857	0.7171	0.7372	Ave		0.7396			0.4000	4.2		20.0			
1-Methylnaphthalene	0.6723 0.6850	0.6697 0.7060	0.6492 0.7160	0.6416	0.6726	Ave		0.6766			0.0100	3.8		20.0			
Hexachlorocyclopentadiene	0.4441 0.5769	0.4252 0.5914	0.4772 0.5975	0.4997	0.5434	Ave		0.5194			0.0500	13.0		20.0			
1,2,4,5-Tetrachlorobenzene	0.8106 0.7570	0.7310 0.7651	0.7391 0.7830	0.7139	0.7666	Ave		0.7583			0.0100	4.0		20.0			
2,4,6-Trichlorophenol	0.4349 0.4467	0.3765 0.4374	0.3942 0.4398	0.4077	0.4234	Ave		0.4201			0.2000	5.9		20.0			
2,4,5-Trichlorophenol	0.4089 0.4525	0.4291 0.4672	0.4318 0.4625	0.4306	0.4501	Ave		0.4416			0.2000	4.5		20.0			
1,1'-Biphenyl	1.6739 1.5394	1.4826 1.5660	1.5078 1.5946	1.4585	1.5340	Ave		1.5446			0.0100	4.4		20.0			
2-Chloronaphthalene	1.4771 1.2840	1.2955 1.3755	1.2623 1.3633	1.2804	1.2192	Ave		1.3197			0.8000	6.2		20.0			
2-Nitroaniline	0.2374 0.3053	0.2765 0.3041	0.2983 0.2992	0.2892	0.3035	Ave		0.2892			0.0100	8.0		20.0			
Dimethyl phthalate	1.3118 1.2701	1.2609 1.3080	1.2788 1.2821	1.2815	1.2913	Ave		1.2856			0.0100	1.4		20.0			
1,3-Dinitrobenzene	0.1515 0.2116	0.1793 0.2134	0.1893 0.2091	0.2088	0.2131	Ave		0.1970			0.0100	11.3		20.0			
2,6-Dinitrotoluene	0.2389 0.2960	0.2678 0.2987	0.2832 0.2972	0.2996	0.3008	Ave		0.2853			0.2000	7.7		20.0			
Acenaphthylene	1.7531 1.9284	1.7288 1.9472	1.8185 1.9402	1.8090	1.8869	Ave		1.8515			0.9000	4.6		20.0			
3-Nitroaniline	0.2669 0.2854	0.2687 0.2948	0.2838 0.2906	0.2972	0.2899	Ave		0.2847			0.0100	4.0		20.0			
Acenaphthene	1.2498 1.2306	1.1601 1.2620	1.1589 1.2610	1.1703	1.2045	Ave		1.2121			0.9000	3.7		20.0			
2,4-Dinitrophenol	+++++ 0.1995	+++++ 0.2187	0.1014 0.2127	0.1574	0.1866	Qua	0.6723	4.5706	-0.018		0.0100			20.0	0.9987		0.9900
4-Nitrophenol	0.1087 0.1662	0.1415 0.1794	0.1555 0.1717	0.1625	0.1672	Ave		0.1566			0.0100	14.3		20.0			
2,4-Dinitrotoluene	0.2663 0.3926	0.3333 0.4093	0.3783 0.3962	0.3804	0.3864	Ave		0.3678			0.2000	12.7		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86218

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2013 05:24 Calibration End Date: 10/09/2013 08:22 Calibration ID: 11737

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dibenzofuran	1.7030 1.6571	1.6517 1.6748	1.6787 1.6551	1.6112	1.6227	Ave		1.6568			0.8000	1.8		20.0			
2,3,5,6-Tetrachlorophenol	+++++ 0.3947	0.2890 0.4097	0.3310 0.4063	0.3570	0.3889	Ave		0.3681			0.0100	12.2		20.0			
2,3,4,6-Tetrachlorophenol	0.3554 0.3870	0.3522 0.4014	0.3779 0.3951	0.3865	0.3993	Ave		0.3819			0.0100	5.0		20.0			
2-Naphthylamine	0.9083 +++++	0.9709 +++++	0.9933 +++++	0.8514	0.6946	Ave		0.8837			0.0100	13.5		20.0			
Diethyl phthalate	1.2145 1.2106	1.1446 1.2465	1.2189 1.2299	1.1943	1.2130	Ave		1.2090			0.0100	2.5		20.0			
Hexadecane	0.3015 0.3435	0.3023 0.3709	0.3117 0.3765	0.3135	0.3336	Ave		0.3317				9.0					
4-Chlorophenyl phenyl ether	0.7439 0.7595	0.7299 0.7544	0.7449 0.7622	0.7180	0.7333	Ave		0.7433			0.4000	2.1		20.0			
4-Nitroaniline	0.2542 0.2867	0.2481 0.2950	0.2692 0.2899	0.2811	0.2699	Ave		0.2743			0.0100	6.2		20.0			
Fluorene	1.3659 1.3244	1.2840 1.3769	1.3159 1.3727	1.2918	1.3252	Ave		1.3321			0.9000	2.7		20.0			
4,6-Dinitro-2-methylphenol	+++++ 0.1555	+++++ 0.1583	0.1146 0.1678	0.1431	0.1459	Qua	0.1540	6.8213	-0.266		0.0100			20.0	0.9998		0.9900
N-Nitrosodiphenylamine	0.5024 0.5613	0.5255 0.5774	0.5085 0.6007	0.5220	0.5492	Ave		0.5434			0.0100	6.4		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	0.6204 0.7426	0.6676 0.7334	0.6898 0.7476	0.6682	0.7114	Ave		0.6976			0.0100	6.4		20.0			
4-Bromophenyl phenyl ether	0.2615 0.2704	0.2641 0.2740	0.2506 0.2803	0.2433	0.2656	Ave		0.2637			0.1000	4.6		20.0			
Hexachlorobenzene	0.2521 0.2542	0.2395 0.2601	0.2332 0.2667	0.2272	0.2448	Ave		0.2472			0.1000	5.5		20.0			
Atrazine	0.2077 0.2179	0.2130 0.1919	0.2292 0.1613	0.2206	0.2250	Ave		0.2083			0.0100	10.7		20.0			
Pentachlorophenol	0.1043 0.1778	0.1056 0.1870	0.0995 0.1998	0.1427	0.1619	Qua	0.2483	6.0144	-0.269		0.0500			20.0	0.9997		0.9900
n-Octadecane	1.2042 1.1479	0.9921 1.1646	1.0911 1.1914	1.1791	1.1299	Ave		1.1375				6.1					
Phenanthrene	1.1217 1.1486	1.0663 1.1839	1.0783 1.2152	1.0507	1.0992	Ave		1.1205			0.7000	5.2		20.0			
Anthracene	1.1004 1.1316	1.0827 1.1428	1.0508 1.1836	1.0700	1.1213	Ave		1.1104			0.7000	3.9		20.0			
Carbazole	1.0016 0.9650	0.9138 0.9887	0.9204 1.0065	0.9402	0.9523	Ave		0.9611			0.0100	3.7		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86218

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2013 05:24 Calibration End Date: 10/09/2013 08:22 Calibration ID: 11737

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Di-n-butyl phthalate	0.9839 1.1563	0.9794 1.1502	1.0608 1.1937	1.0925	1.1461	Ave		1.0954			0.0100	7.4		20.0			
Fluoranthene	1.2183 1.2520	1.1919 1.3026	1.2189 1.2873	1.2526	1.2313	Ave		1.2444			0.6000	3.0		20.0			
Benzidine	0.1608 0.2136	0.3792 0.1997	0.4099 +++++	0.3350	0.2941	Qua	-0.039	2.5025	1.7452		0.0100			20.0	0.9952		0.9900
Pyrene	1.3158 1.2692	1.2284 1.2267	1.2703 1.2631	1.2514	1.3318	Ave		1.2696			0.6000	3.0		20.0			
Butyl benzyl phthalate	0.4101 0.4630	0.3658 0.4516	0.3901 0.4765	0.4441	0.4681	Ave		0.4337			0.0100	9.3		20.0			
3,3'-Dichlorobenzidine	0.3340 0.4121	0.3228 0.4235	0.3395 0.4442	0.3793	0.4064	Ave		0.3827			0.0100	12.0		20.0			
Bis(2-ethylhexyl) phthalate	+++++ 0.6195	0.4421 0.6217	0.5076 0.6474	0.5794	0.6151	Ave		0.5761			0.0100	12.9		20.0			
Benzo[a]anthracene	1.2970 1.1352	1.0898 1.1378	1.1096 1.1762	1.1102	1.1572	Ave		1.1516			0.8000	5.6		20.0			
Chrysene	1.0213 1.0272	1.0515 1.0157	1.0307 1.0580	0.9968	1.0463	Ave		1.0309			0.7000	2.0		20.0			
Di-n-octyl phthalate	0.8515 1.2803	0.8642 1.2979	0.9867 1.3653	1.1103	1.2448	Qua	0.0627	0.8223	-0.007		0.0100			20.0	0.9998		0.9900
7,12-Dimethylbenz(a)anthracene	0.4752 0.6408	0.5087 0.6685	0.5360 0.6995	0.5600	0.6313	Ave		0.5900			0.0100	13.7		20.0			
Benzo[b]fluoranthene	1.3148 1.4270	1.2972 1.4055	1.3053 1.4944	1.3968	1.4979	Ave		1.3924			0.7000	5.8		20.0			
Benzo[k]fluoranthene	1.4974 1.3518	1.3500 1.4101	1.4219 1.4076	1.3250	1.3442	Ave		1.3885			0.7000	4.1		20.0			
Benzo[a]pyrene	1.1308 1.2459	1.1928 1.2756	1.1622 1.3337	1.2152	1.2556	Ave		1.2265			0.7000	5.3		20.0			
Indeno[1,2,3-cd]pyrene	1.1984 1.3068	1.1621 1.3639	1.1629 1.4227	1.2084	1.2770	Ave		1.2628			0.5000	7.6		20.0			
Dibenz(a,h)anthracene	1.0016 1.0819	0.9688 1.1455	0.9704 1.2165	1.0522	1.0757	Ave		1.0641			0.4000	8.1		20.0			
Benzo[g,h,i]perylene	0.9764 1.0726	0.9528 1.1361	0.9780 1.1856	1.0407	1.0501	Ave		1.0490			0.5000	7.8		20.0			
2-Fluorophenol (Surr)	1.0763 1.3056	1.1790 1.2920	1.2561 1.2919	1.2680	1.2901	Ave		1.2449				6.3		20.0			
Phenol-d5 (Surr)	1.4462 1.4919	1.3836 1.4756	1.4488 1.4930	1.4791	1.4828	Ave		1.4626				2.5		20.0			
Nitrobenzene-d5 (Surr)	0.3473 0.3607	0.3569 0.3686	0.3551 0.3695	0.3458	0.3621	Ave		0.3582				2.5		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86218

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2013 05:24 Calibration End Date: 10/09/2013 08:22 Calibration ID: 11737

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Fluorobiphenyl	1.4478 1.5090	1.4556 1.5034	1.4716 1.5319	1.4489	1.4995	Ave		1.4835				2.1		20.0			
2,4,6-Tribromophenol (Surr)	0.0666 0.0971	0.0795 0.0998	0.0828 0.0995	0.0868	0.0913	Ave		0.0879			0.0100	13.1		20.0			
Terphenyl-d14 (Surr)	1.0357 0.9543	0.8969 0.9156	0.9340 0.9366	0.9162	0.9837	Ave		0.9466				4.7		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86218

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2013 05:24 Calibration End Date: 10/09/2013 08:22 Calibration ID: 11737

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86218/2	N1009IC1.D
Level 2	IC 180-86218/3	N1009IC2.D
Level 3	IC 180-86218/4	N1009IC3.D
Level 4	ICIS 180-86218/5	N1009IC4.D
Level 5	IC 180-86218/6	N1009IC5.D
Level 6	IC 180-86218/9	N1009IC8.D
Level 7	IC 180-86218/7	N1009IC6.D
Level 8	IC 180-86218/8	N1009IC7.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dioxane	DCB	Ave	4407 396633	20460 559140	41020 697506	117386	209430	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosodimethylamine	DCB	Ave	4506 531128	23923 730208	48673 920421	155922	274132	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pyridine	DCB	Ave	+++++ 964445	44989 1107431	94711 1540429	289975	509966	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Methyl methanesulfonate	DCB	Ave	6548 567068	28035 766030	61480 924155	181659	303474	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzaldehyde	DCB	Ave	8958 749772	35767 991228	78464 1131307	236769	408815	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenol	DCB	Ave	15435 1303212	60710 1805750	120062 2250413	385287	656048	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Aniline	DCB	Ave	14438 1413424	64985 1823867	135729 2285273	425779	724158	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-chloroethyl)ether	DCB	Ave	8512 828057	39846 1172561	83276 1436633	242048	424448	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Chlorophenol	DCB	Ave	10749 1029931	50685 1439058	97695 1816202	298233	531323	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
n-Decane	DCB	Ave	7825 787805	37130 1081785	79403 1370302	228116	398690	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	11900 1263944	58623 1743239	121305 2198386	373611	641309	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	13678 1252675	60757 1777241	123486 2205090	366256	640977	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzyl alcohol	DCB	Ave	5806 592566	25922 823928	53119 1032294	169334	302149	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	12908 1177622	56160 1648410	115008 2058829	343817	602281	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Methylphenol	DCB	Ave	9465 875705	40363 1241064	79931 1549112	247813	437137	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86218

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2013 05:24 Calibration End Date: 10/09/2013 08:22 Calibration ID: 11737

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Indene	DCB	Ave	17606 1799627	78236 2557067	165760 3280469	498366	883342	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,2'-oxybis[1-chloropropane]	DCB	Ave	9900 900642	43754 1260386	88265 1540322	262582	465695	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosopyrrolidine	DCB	Ave	4116 386387	16800 505606	35574 661329	111136	199844	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acetophenone	DCB	Ave	19163 1349257	66100 1888655	131584 2371942	392914	677174	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosodi-n-propylamine	DCB	Ave	6410 632335	28933 878517	63133 1133835	184502	328170	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Methylphenol, 3 & 4	DCB	Ave	9357 943575	39567 1320086	85113 1695931	263234	461173	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachloroethane	DCB	Ave	5254 471538	21964 669258	45655 828381	139219	238511	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Nitrobenzene	NPT	Ave	10603 974602	47540 1311569	94553 1654300	286996	504446	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Isophorone	NPT	Ave	15242 1605683	73606 2214370	152976 2782507	466282	806005	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Nitrophenol	NPT	Ave	5397 551093	22566 779318	48260 960736	161525	279293	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dimethylphenol	NPT	Ave	9533 899652	37515 1282247	73718 1606978	239180	420719	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-chloroethoxy)methane	NPT	Ave	9726 998627	46964 1371272	93690 1712722	281231	503520	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzoic acid	NPT	Qua	+++++ 967765	+++++ 1312703	47985 1712441	209924	463377	+++++ 80.0	+++++ 120	8.00 160	20.0	40.0
2,4-Dichlorophenol	NPT	Ave	9137 887829	40376 1243867	85231 1542653	264849	459573	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2,4-Trichlorobenzene	NPT	Ave	10614 1068727	52730 1491351	110122 1850179	318633	558176	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Naphthalene	NPT	Ave	31526 2860503	135581 4039807	270891 5067423	827894	1462910	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chloroaniline	NPT	Ave	11659 1149601	53034 1623029	114352 2021912	344992	603164	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,6-Dichlorophenol	NPT	Ave	8747 855900	39095 1205517	81469 1498152	253773	442130	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorobutadiene	NPT	Ave	7478 721212	36985 1010727	69499 1239737	212950	371073	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Caprolactam	NPT	Ave	+++++ 218612	9793 302309	16953 375374	61720	104064	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chloro-3-methylphenol	NPT	Ave	8408 773634	34664 1082586	75786 1362666	235075	406397	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86218

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2013 05:24 Calibration End Date: 10/09/2013 08:22 Calibration ID: 11737

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
2-Methylnaphthalene	NPT	Ave	21035 2031903	92608 2815030	190626 3524728	599012	1020687	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1-Methylnaphthalene	NPT	Ave	19144 1840064	88821 2564965	174686 3212198	536012	931194	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorocyclopentadiene	ANT	Ave	6970 865191	31944 1234770	71918 1551969	232795	423316	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2,4,5-Tetrachlorobenzene	ANT	Ave	12721 1135207	54913 1597401	111384 2033708	332611	597152	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,6-Trichlorophenol	ANT	Ave	6825 669838	28285 913289	59408 1142395	189964	329847	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,5-Trichlorophenol	ANT	Ave	6417 678568	32231 975395	65077 1201212	200605	350621	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,1'-Biphenyl	ANT	Ave	26269 2308538	111373 3269661	227230 4141694	679494	1194970	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Chloronaphthalene	ANT	Ave	23180 1925643	97316 2871986	190229 3540962	596538	949708	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Nitroaniline	ANT	Ave	3726 457844	20770 634843	44961 777078	134743	236423	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dimethyl phthalate	ANT	Ave	20587 1904676	94720 2731022	192714 3330077	597058	1005891	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,3-Dinitrobenzene	ANT	Ave	2378 317406	13472 445481	28524 543146	97300	165993	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,6-Dinitrotoluene	ANT	Ave	3749 443853	20117 623755	42672 771970	139584	234335	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acenaphthylene	ANT	Ave	27512 2891918	129869 4065645	274054 5039132	842830	1469795	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
3-Nitroaniline	ANT	Ave	4188 428052	20183 615420	42763 754864	138464	225826	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acenaphthene	ANT	Ave	19613 1845466	87147 2635053	174645 3275152	545227	938288	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dinitrophenol	ANT	Qua	+++++ 598456	+++++ 913359	30547 1104967	146704	290693	+++++ 80.0	+++++ 120	8.00 160	20.0	40.0
4-Nitrophenol	ANT	Ave	3413 498598	21252 748984	46872 891824	151449	260409	0.800 80.0	4.00 120	8.00 160	20.0	40.0
2,4-Dinitrotoluene	ANT	Ave	4179 588778	25039 854498	57009 1029082	177222	301014	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dibenzofuran	ANT	Ave	26725 2485182	124075 3496797	252976 4298871	750647	1264033	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,3,5,6-Tetrachlorophenol	ANT	Ave	+++++ 591875	21712 855403	49885 1055326	166345	302973	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,3,4,6-Tetrachlorophenol	ANT	Ave	5577 580406	26457 838194	56953 1026246	180055	311074	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0

FORM VI

GC/MS SEMI VOA INITIAL CALIBRATION DATA

INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86218

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2013 05:24 Calibration End Date: 10/09/2013 08:22 Calibration ID: 11737

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
2-Naphthylamine	ANT	Ave	14255 +++++	72935 +++++	149692 +++++	396689	541034	0.400 +++++	2.00 +++++	4.00 +++++	10.0	20.0
Diethyl phthalate	ANT	Ave	19060 1815485	85985 2602626	183685 3194370	556417	944854	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexadecane	NPT	Ave	8584 922745	40097 1347616	83858 1689045	261854	461937	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chlorophenyl phenyl ether	ANT	Ave	11674 1139046	54833 1575076	112262 1979739	334522	571235	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Nitroaniline	ANT	Ave	3989 429947	18637 616043	40573 752891	130984	210269	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Fluorene	ANT	Ave	21435 1986246	96456 2874945	198299 3565301	601869	1032323	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4,6-Dinitro-2-methylphenol	PHN	Qua	+++++ 715257	+++++ 1030895	58444 1302489	224899	362398	+++++ 80.0	+++++ 120	8.00 160	20.0	40.0
N-Nitrosodiphenylamine	PHN	Ave	13228 1290795	65002 1880254	129680 2331095	410162	681904	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2-Diphenylhydrazine(as Azobenzene)	PHN	Ave	16336 1707731	82589 2388157	175920 2900939	524970	883298	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Bromophenyl phenyl ether	PHN	Ave	6885 621835	32674 892090	63921 1087753	191179	329788	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorobenzene	PHN	Ave	6638 584470	29631 847059	59462 1035067	178508	304001	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Atrazine	PHN	Ave	5470 501000	26345 624990	58457 626011	173308	279300	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pentachlorophenol	PHN	Qua	5494 817927	26128 1217739	50750 1550334	224270	401961	0.800 80.0	4.00 120	8.00 160	20.0	40.0
n-Octadecane	DCB	Ave	9545 906457	38211 1276387	83754 1618029	277262	457281	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenanthrene	PHN	Ave	29535 2641407	131904 3855172	274997 4715654	825480	1364770	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Anthracene	PHN	Ave	28974 2602298	133933 3721417	267990 4592910	840711	1392160	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Carbazole	PHN	Ave	26372 2219132	113049 3219467	234740 3905922	738707	1182392	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Di-n-butyl phthalate	PHN	Ave	25906 2659029	121153 3745485	270530 4632338	858378	1422955	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Fluoranthene	PHN	Ave	32079 2879095	147450 4241623	310858 4995600	984174	1528768	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzidine	CRY	Qua	3944 478591	45411 670037	102802 +++++	258632	344184	0.400 40.0	2.00 60.0	4.00 +++++	10.0	20.0
Pyrene	CRY	Ave	32282 2843375	147089 4114742	318565 5097924	966221	1558743	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86218

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2013 05:24 Calibration End Date: 10/09/2013 08:22 Calibration ID: 11737

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Butyl benzyl phthalate	CRY	Ave	10062 1037330	43805 1515008	97819 1923043	342918	547918	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
3,3'-Dichlorobenzidine	CRY	Ave	8194 923163	38651 1420737	85151 1792581	292860	475611	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-ethylhexyl) phthalate	CRY	Ave	+++++ 1387866	52936 2085333	127301 2612717	447394	719962	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[a]anthracene	CRY	Ave	31822 2543174	130502 3816731	278251 4747142	857247	1354399	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Chrysene	CRY	Ave	25058 2301390	125915 3407037	258466 4269911	769702	1224590	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Di-n-octyl phthalate	PRY	Qua	15275 2280694	78029 3427323	183681 4415951	664163	1110938	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
7,12-Dimethylbenz(a)anthracene	PRY	Ave	8525 1141563	45933 1765374	99770 2262415	334991	563415	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[b]fluoranthene	PRY	Ave	23587 2542171	117127 3711529	242975 4833360	835571	1336863	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[k]fluoranthene	PRY	Ave	26863 2408086	121898 3723567	264691 4552825	792626	1199627	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[a]pyrene	PRY	Ave	20286 2219560	107699 3368483	216345 4313607	726944	1120607	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Indeno[1,2,3-cd]pyrene	PRY	Ave	21498 2328059	104927 3601564	216474 4601737	722868	1139707	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dibenz(a,h)anthracene	PRY	Ave	17969 1927352	87476 3024933	180647 3934621	629421	960008	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[g,h,i]perylene	PRY	Ave	17517 1910738	86030 2999933	182056 3834570	622558	937220	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Fluorophenol (Surr)	DCB	Ave	8531 1030963	45407 1416039	96420 1754544	298162	522116	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenol-d5 (Surr)	DCB	Ave	11463 1178098	53289 1617320	111207 2027651	347807	600096	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Nitrobenzene-d5 (Surr)	NPT	Ave	9890 968923	47330 1339134	95561 1657703	288855	501299	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Fluorobiphenyl	ANT	Ave	22721 2263022	109347 3139069	221771 3978737	675048	1168088	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,6-Tribromophenol (Surr)	PHN	Ave	1753 223189	9837 324973	21116 386042	68164	113384	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Terphenyl-d14 (Surr)	CRY	Ave	25410 2138056	107398 3071238	234227 3780133	707458	1151303	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0

Curve Type Legend:

Ave = Average ISTD
Qua = Quadratic ISTD

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN100913D.b\N1009IC1.D
Lab Smp Id: IC 839798
Inj Date : 09-OCT-2013 05:24
Operator : 3200 Inst ID: 733.i
Smp Info : IC 839798
Misc Info : TN100913D.b,T8270d.m,tapitt.sub
Comment :
Method : \\PITSVR06\D\chem\733.i\TN100913D.b\T8270d.m
Meth Date : 08-Oct-2013 08:32 piccolinov Quant Type: ISTD
Cal Date : 09-OCT-2013 05:24 Cal File: N1009IC1.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: tapitt.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 1	1,4-Dichlorobenzene-d4	152	6.243	6.243	(1.000)	158527	8.00000	
* 2	Naphthalene-d8	136	7.472	7.472	(1.000)	569471	8.00000	
* 3	Acenaphthene-d10	164	9.128	9.128	(1.000)	313867	8.00000	
* 4	Phenanthrene-d10	188	10.522	10.522	(1.000)	526611	8.00000	
* 5	Chrysene-d12	240	14.102	14.102	(1.000)	490697	8.00000	
* 6	Perylene-d12	264	17.051	17.051	(1.000)	358793	8.00000	
198	1,4-Dioxane	88	1.676	1.676	(0.268)	4407	0.40000	0.40000(M)
10	N-Nitrosodimethylamine	74	2.317	2.317	(0.371)	4506	0.40000	0.40000(M)
9	Pyridine	79	2.429	2.429	(0.389)	5204	0.40000	0.40000(M)
16	Methyl methanesulfonate	80	4.614	4.614	(0.739)	6548	0.40000	0.40000
206	Benzaldehyde	77	5.789	5.789	(0.927)	8958	0.40000	0.40000
21	Aniline	93	5.901	5.901	(0.945)	14438	0.40000	0.40000
22	Phenol	94	5.891	5.891	(0.944)	15435	0.40000	0.40000
23	bis(2-Chloroethyl)ether	93	5.971	5.971	(0.956)	8512	0.40000	0.40000
24	2-Chlorophenol	128	6.030	6.030	(0.966)	10749	0.40000	0.40000
226	n-Decane	43	6.099	6.099	(0.977)	7825	0.40000	0.40000
26	1,3-Dichlorobenzene	146	6.185	6.185	(0.991)	11900	0.40000	0.40000
27	1,4-Dichlorobenzene	146	6.259	6.259	(1.003)	13678	0.40000	0.40000
28	1,2-Dichlorobenzene	146	6.414	6.414	(1.027)	12908	0.40000	0.40000
217	Indene	116	6.500	6.500	(1.041)	17606	0.40000	0.40000
29	Benzyl Alcohol	108	6.366	6.366	(1.020)	5806	0.40000	0.40000
30	2-Methylphenol	108	6.484	6.484	(1.039)	9465	0.40000	0.40000
31	2,2'-oxybis(1-Chloropropane)	45	6.510	6.510	(1.043)	9900	0.40000	0.40000
37	Acetophenone	105	6.628	6.628	(1.062)	19163	0.40000	0.40000
32	N-Nitroso-di-n-propylamine	70	6.628	6.628	(1.062)	6410	0.40000	0.40000
192	4-Methylphenol	108	6.633	6.633	(1.062)	9357	0.40000	0.40000
34	Hexachloroethane	117	6.746	6.746	(1.080)	5254	0.40000	0.40000
77	1,3-Dinitrobenzene	168	8.877	8.877	(0.972)	2378	0.40000	0.40000
35	Nitrobenzene	77	6.794	6.794	(0.909)	10603	0.40000	0.40000

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
36 N-Nitrosopyrrolidine	100	6.596	6.596	(1.056)	4116	0.40000	0.40000
41 Isophorone	82	7.018	7.018	(0.939)	15242	0.40000	0.40000
42 2-Nitrophenol	139	7.109	7.109	(0.951)	5397	0.40000	0.40000
43 2,4-Dimethylphenol	107	7.136	7.136	(0.955)	9533	0.40000	0.40000
44 bis(2-Chloroethoxy)methane	93	7.221	7.221	(0.966)	9726	0.40000	0.40000
48 2,4-Dichlorophenol	162	7.333	7.333	(0.981)	9137	0.40000	0.40000
49 Benzoic Acid	122	7.184	7.184	(0.961)	2271	0.80000	0.80000
50 1,2,4-Trichlorobenzene	180	7.419	7.419	(0.993)	10614	0.40000	0.40000
51 Naphthalene	128	7.493	7.493	(1.003)	31526	0.40000	0.40000
52 4-Chloroaniline	127	7.531	7.531	(1.008)	11659	0.40000	0.40000
54 2,6-Dichlorophenol	162	7.542	7.542	(1.009)	8747	0.40000	0.40000
56 Hexachlorobutadiene	225	7.616	7.616	(1.019)	7478	0.40000	0.40000
208 Caprolactam	113	7.830	7.830	(1.048)	1376	0.40000	0.40000
59 4-Chloro-3-Methylphenol	107	7.974	7.974	(1.067)	8408	0.40000	0.40000
62 2-Methylnaphthalene	142	8.145	8.145	(1.090)	21035	0.40000	0.40000
63 1-Methylnaphthalene	142	8.241	8.241	(1.103)	19144	0.40000	0.40000
64 Hexachlorocyclopentadiene	237	8.300	8.300	(0.909)	6970	0.40000	0.40000
65 1,2,4,5-Tetrachlorobenzene	216	8.311	8.311	(0.910)	12721	0.40000	0.40000
66 2,4,6-Trichlorophenol	196	8.407	8.407	(0.921)	6825	0.40000	0.40000
67 2,4,5-Trichlorophenol	196	8.439	8.439	(0.925)	6417	0.40000	0.40000
209 1,1'-Biphenyl	154	8.578	8.578	(0.940)	26269	0.40000	0.40000
70 2-Chloronaphthalene	162	8.605	8.605	(0.943)	23180	0.40000	0.40000
73 2-Nitroaniline	65	8.685	8.685	(0.951)	3726	0.40000	0.40000
76 Dimethylphthalate	163	8.840	8.840	(0.968)	20587	0.40000	0.40000
78 2,6-Dinitrotoluene	165	8.904	8.904	(0.975)	3749	0.40000	0.40000
79 Acenaphthylene	152	9.000	9.000	(0.986)	27512	0.40000	0.40000
81 3-Nitroaniline	138	9.064	9.064	(0.993)	4188	0.40000	0.40000
82 Acenaphthene	153	9.160	9.160	(1.004)	19613	0.40000	0.40000
83 2,4-Dinitrophenol	184	9.171	9.171	(1.005)	949	0.80000	0.80000
85 4-Nitrophenol	109	9.203	9.203	(1.008)	3413	0.80000	0.80000
86 Dibenzofuran	168	9.320	9.320	(1.021)	26725	0.40000	0.40000
87 2,4-Dinitrotoluene	165	9.283	9.283	(1.017)	4179	0.40000	0.40000
91 2,3,5,6-Tetrachlorophenol	232	9.395	9.395	(1.029)	3597	0.40000	0.40000
88 2,3,4,6-Tetrachlorophenol	232	9.438	9.438	(1.034)	5577	0.40000	0.40000
92 2-Naphthylamine	143	9.459	9.459	(1.036)	14255	0.40000	0.40000
93 Diethylphthalate	149	9.491	9.491	(1.040)	19060	0.40000	0.40000
230 n-Hexadecane	57	9.497	9.497	(1.271)	8584	0.40000	0.40000
94 Fluorene	166	9.641	9.641	(1.056)	21435	0.40000	0.40000
95 4-Chlorophenyl-phenylether	204	9.625	9.625	(1.054)	11674	0.40000	0.40000
96 4-Nitroaniline	138	9.630	9.630	(1.055)	3989	0.40000	0.40000
98 4,6-Dinitro-2-methylphenol	198	9.678	9.678	(0.920)	3050	0.80000	0.80000
99 N-Nitrosodiphenylamine (1)	169	9.732	9.732	(0.925)	13228	0.40000	0.40000
100 1,2-Diphenylhydrazine	77	9.769	9.769	(0.928)	16336	0.40000	0.40000
106 4-Bromophenyl-phenylether	248	10.079	10.079	(0.958)	6885	0.40000	0.40000
107 Hexachlorobenzene	284	10.170	10.170	(0.966)	6638	0.40000	0.40000
210 Atrazine	200	10.197	10.197	(0.969)	5470	0.40000	0.40000
227 n-Octadecane	57	10.346	10.346	(1.657)	9545	0.40000	0.40000
111 Pentachlorophenol	266	10.346	10.346	(0.983)	5494	0.80000	0.80000
115 Phenanthrene	178	10.544	10.544	(1.002)	29535	0.40000	0.40000
116 Anthracene	178	10.597	10.597	(1.007)	28974	0.40000	0.40000
119 Carbazole	167	10.741	10.741	(1.021)	26372	0.40000	0.40000
120 Di-n-Butylphthalate	149	11.046	11.046	(1.050)	25906	0.40000	0.40000
123 Fluoranthene	202	11.863	11.863	(1.127)	32079	0.40000	0.40000
124 Benzidine	184	11.981	11.981	(0.850)	3944	0.40000	0.40000(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
125 Pyrene	202	12.168	12.168	(0.863)	32282	0.40000	0.40000
131 Butylbenzylphthalate	149	13.033	13.033	(0.924)	10062	0.40000	0.40000
135 3,3'-Dichlorobenzidine	252	14.006	14.006	(0.993)	8194	0.40000	0.40000(M)
136 Benzo(a)Anthracene	228	14.080	14.080	(0.998)	31822	0.40000	0.40000
137 Chrysene	228	14.155	14.155	(1.004)	25058	0.40000	0.40000
139 bis(2-ethylhexyl)Phthalate	149	14.048	14.048	(0.996)	10442	0.40000	0.40000(M)
140 Di-n-octylphthalate	149	15.368	15.368	(0.901)	15275	0.40000	0.40000(M)
141 Benzo(b)fluoranthene	252	16.244	16.244	(0.953)	23587	0.40000	0.40000
142 Benzo(k)fluoranthene	252	16.297	16.297	(0.956)	26863	0.40000	0.40000
143 7,12-dimethylbenz[a]anthracen	256	16.233	16.233	(0.952)	8525	0.40000	0.40000
146 Benzo(a)pyrene	252	16.933	16.933	(0.993)	20286	0.40000	0.40000(M)
149 Indeno(1,2,3-cd)pyrene	276	19.289	19.289	(1.131)	21498	0.40000	0.40000(M)
150 Dibenz(a,h)anthracene	278	19.316	19.316	(1.133)	17969	0.40000	0.40000(M)
151 Benzo(g,h,i)perylene	276	19.903	19.903	(1.167)	17517	0.40000	0.40000(M)
$ 154 Nitrobenzene-d5	82	6.778	6.778	(0.907)	9890	0.40000	0.40000
$ 155 2-Fluorobiphenyl	172	8.482	8.482	(0.929)	22721	0.40000	0.40000
$ 156 Terphenyl-d14	244	12.328	12.328	(0.874)	25410	0.40000	0.40000
$ 157 Phenol-d5	99	5.875	5.875	(0.941)	11463	0.40000	0.40000
$ 158 2-Fluorophenol	112	4.854	4.854	(0.778)	8531	0.40000	0.40000
$ 159 2,4,6-Tribromophenol	330	9.871	9.871	(0.938)	1753	0.40000	0.40000

QC Flag Legend

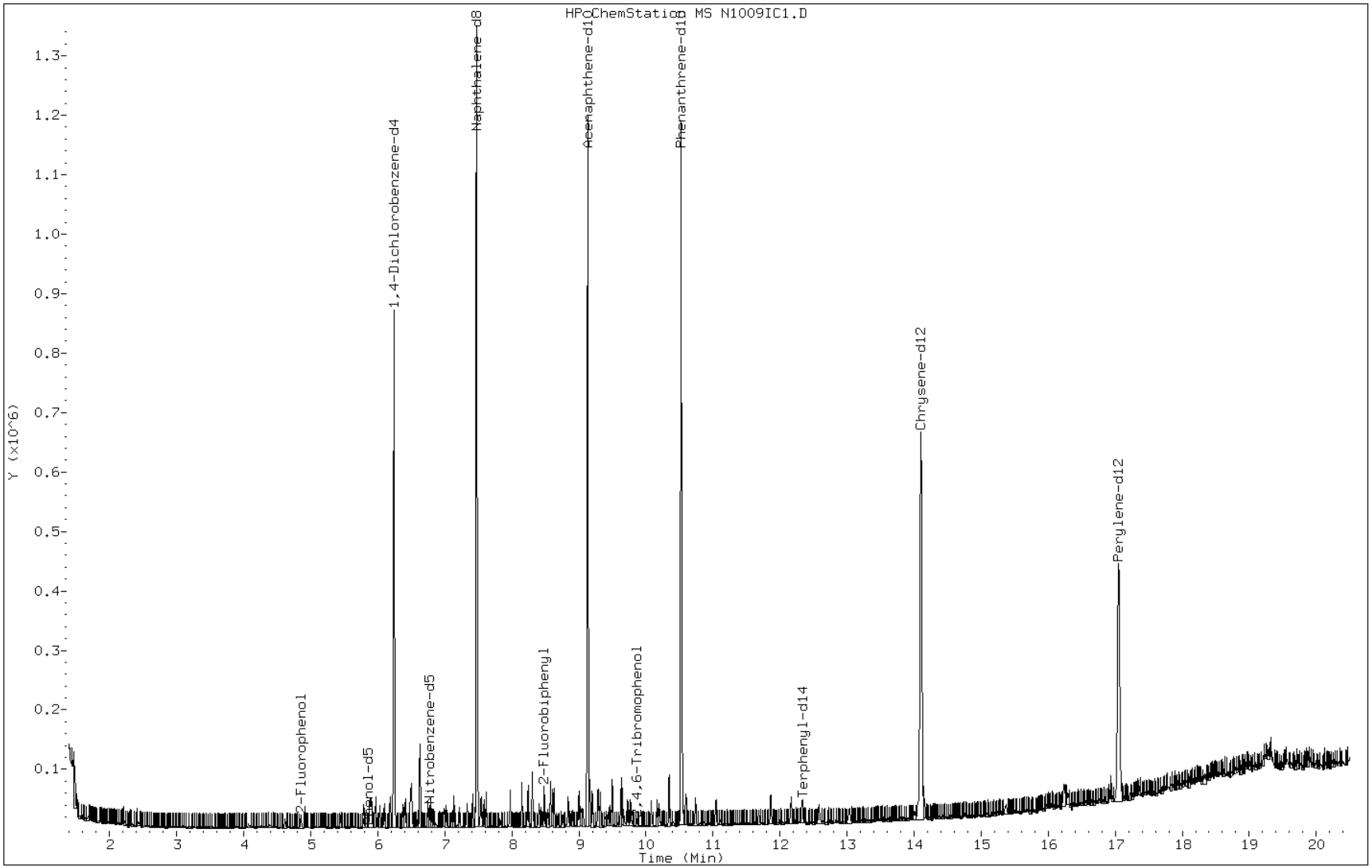
M - Compound response manually integrated.

Data File: N1009IC1.D

Date: 09-OCT-2013 05:24

Client ID: Instrument: 733.i

Sample Info: IC 839798 Operator: 3200



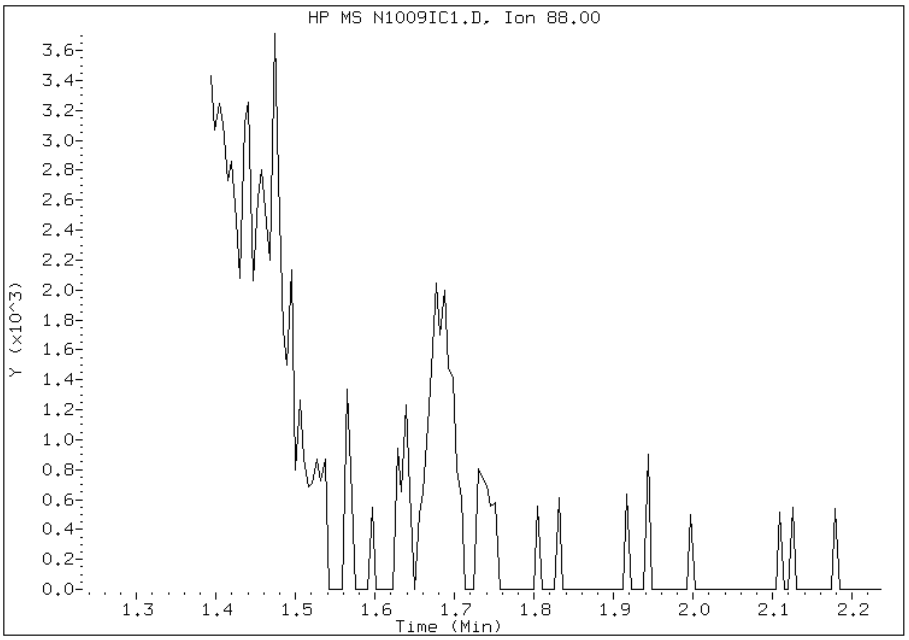
Manual Integration Report

Data File: N1009IC1.D
Inj. Date and Time: 09-OCT-2013 05:24
Instrument ID: 733.i
Client ID:
Compound: 198 1,4-Dioxane
CAS #: 123-91-1
Report Date: 10/09/2013

Processing Integration Results

Not Detected

Expected RT: 1.74



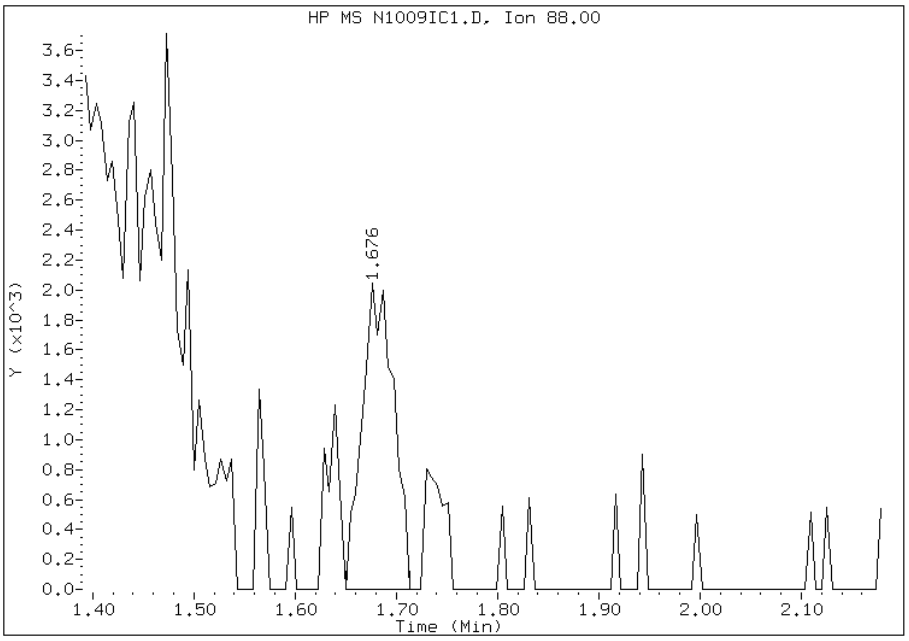
Manual Integration Results

RT: 1.68

Response: 4407

Amount: 0

Conc: 0



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:15
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N1009IC1.D
Inj. Date and Time: 09-OCT-2013 05:24
Instrument ID: 733.i
Client ID:
Compound: 10 N-Nitrosodimethylamine
CAS #: 62-75-9
Report Date: 10/09/2013

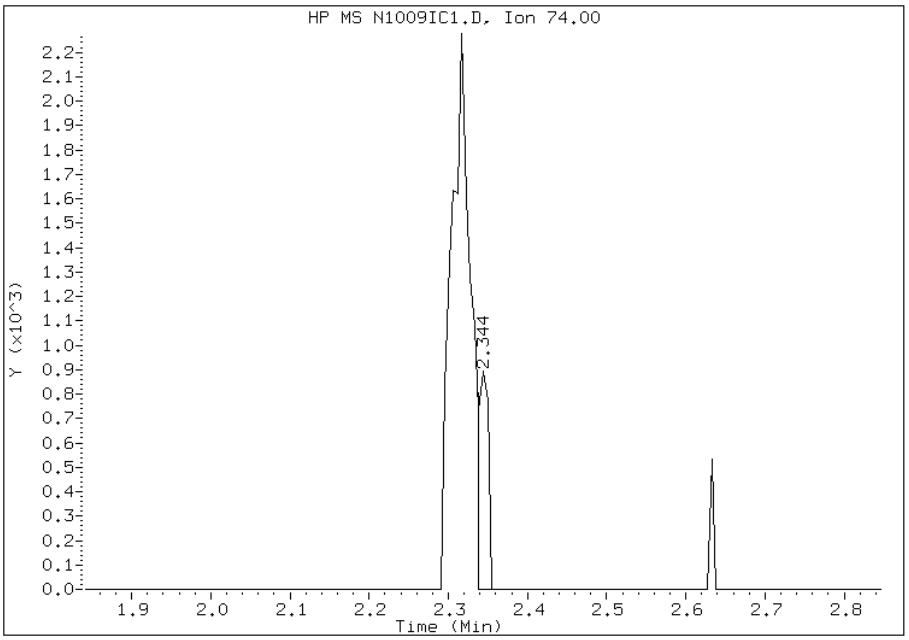
Processing Integration Results

RT: 2.34

Response: 768

Amount: 0

Conc: 0



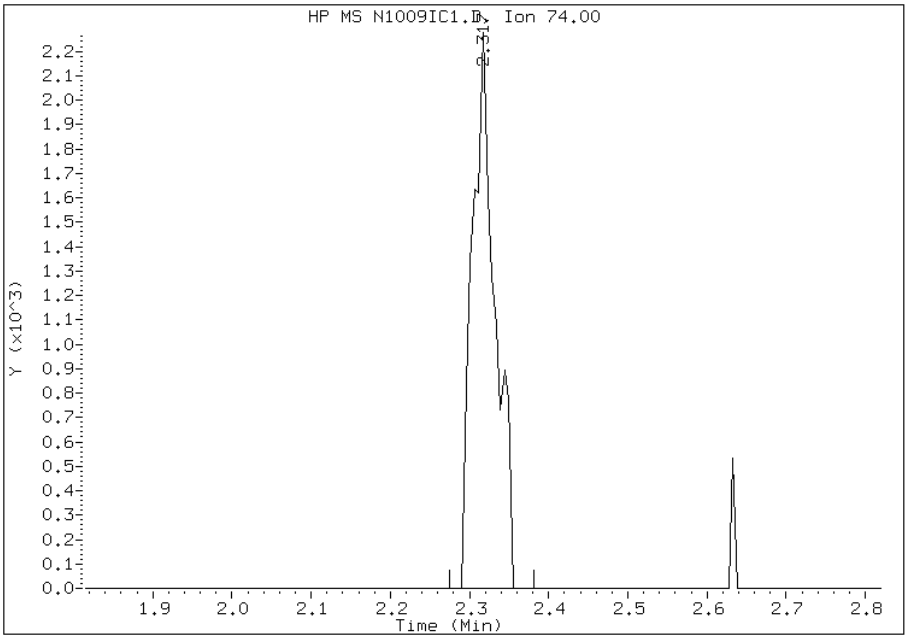
Manual Integration Results

RT: 2.32

Response: 4506

Amount: 0

Conc: 0



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:15
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC1.D
Inj. Date and Time: 09-OCT-2013 05:24
Instrument ID: 733.i
Client ID:
Compound: 9 Pyridine
CAS #: 110-86-1
Report Date: 10/09/2013

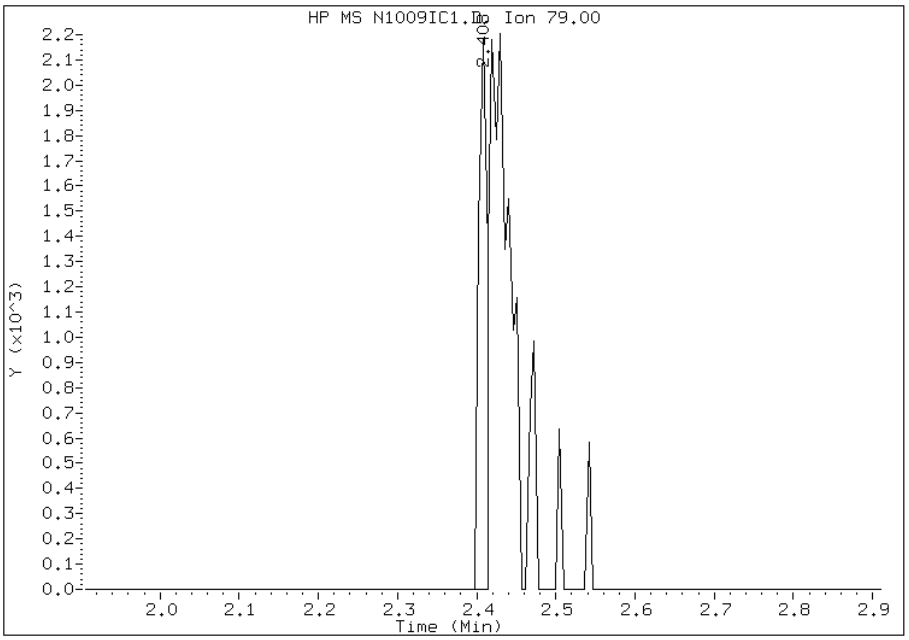
Processing Integration Results

RT: 2.41

Response: 1595

Amount: 0

Conc: 0



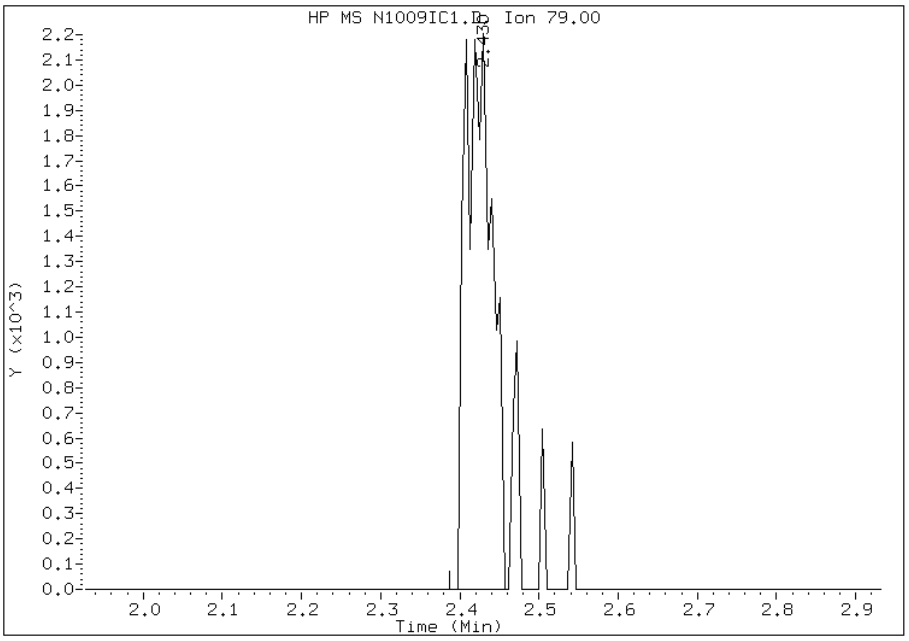
Manual Integration Results

RT: 2.43

Response: 5204

Amount: 0

Conc: 0



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:15
Manual Integration Reason: Poor Chromatography

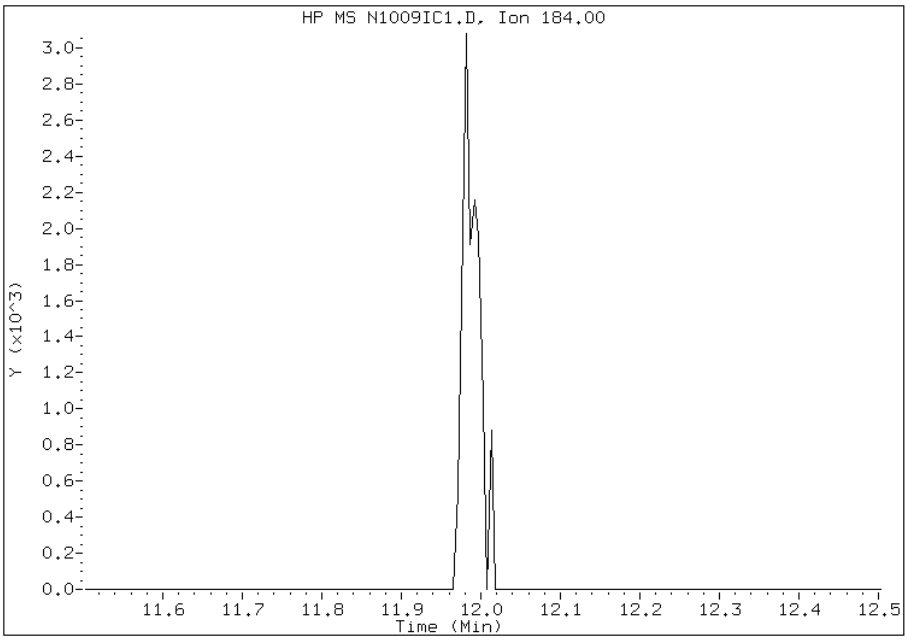
Manual Integration Report

Data File: N1009IC1.D
Inj. Date and Time: 09-OCT-2013 05:24
Instrument ID: 733.i
Client ID:
Compound: 124 Benzidine
CAS #: 92-87-5
Report Date: 10/09/2013

Processing Integration Results

Not Detected

Expected RT: 12.00



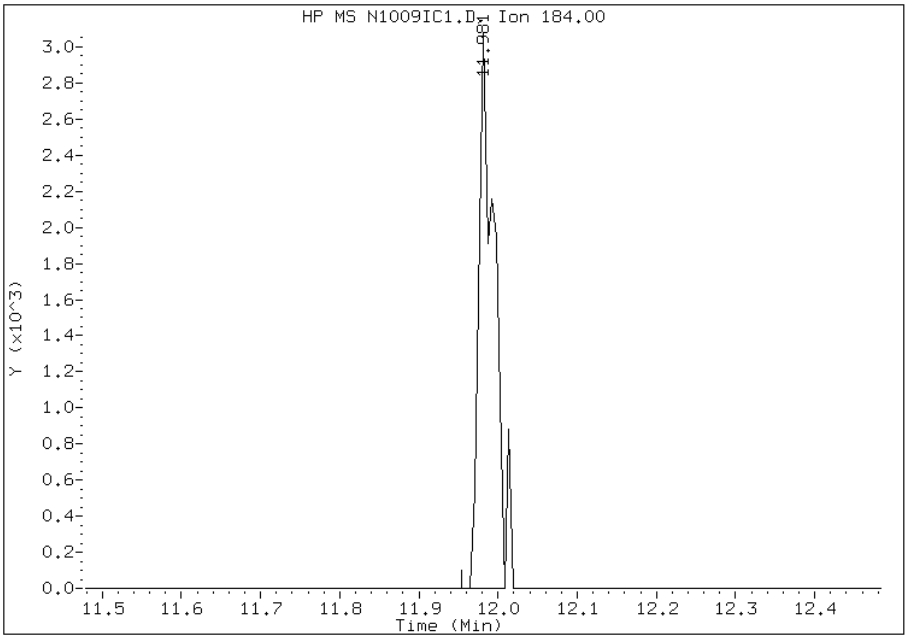
Manual Integration Results

RT: 11.98

Response: 3944

Amount: 0

Conc: 0



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:16
Manual Integration Reason: Peak Not Found

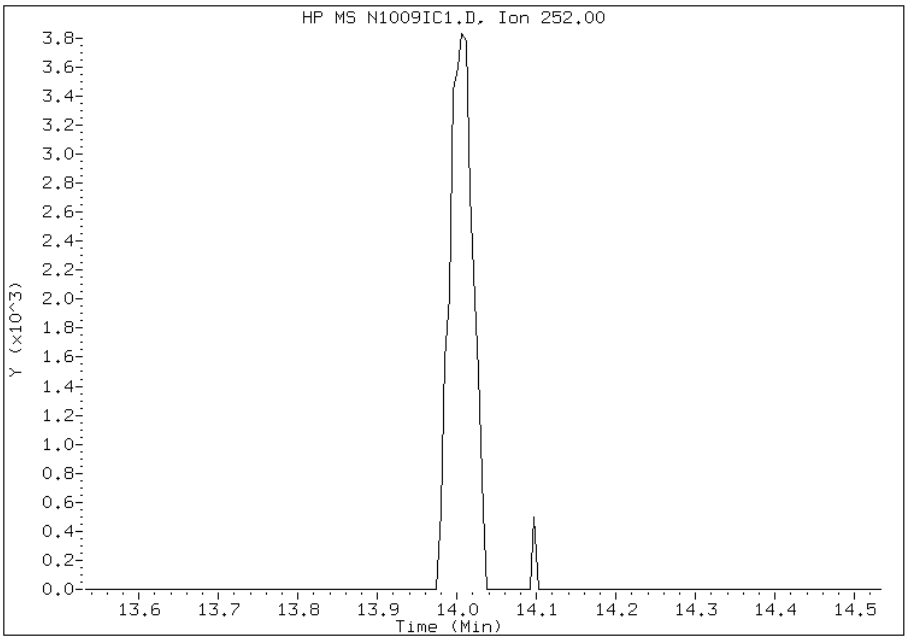
Manual Integration Report

Data File: N1009IC1.D
Inj. Date and Time: 09-OCT-2013 05:24
Instrument ID: 733.i
Client ID:
Compound: 135 3,3'-Dichlorobenzidine
CAS #: 91-94-1
Report Date: 10/09/2013

Processing Integration Results

Not Detected

Expected RT: 14.03



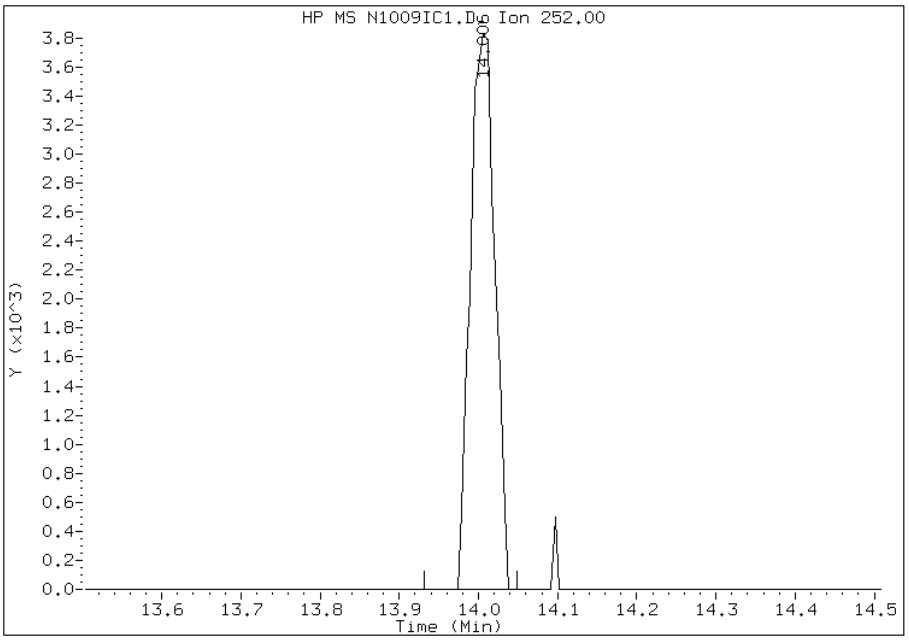
Manual Integration Results

RT: 14.01

Response: 8194

Amount: 0

Conc: 0



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:16
Manual Integration Reason: Peak Not Found

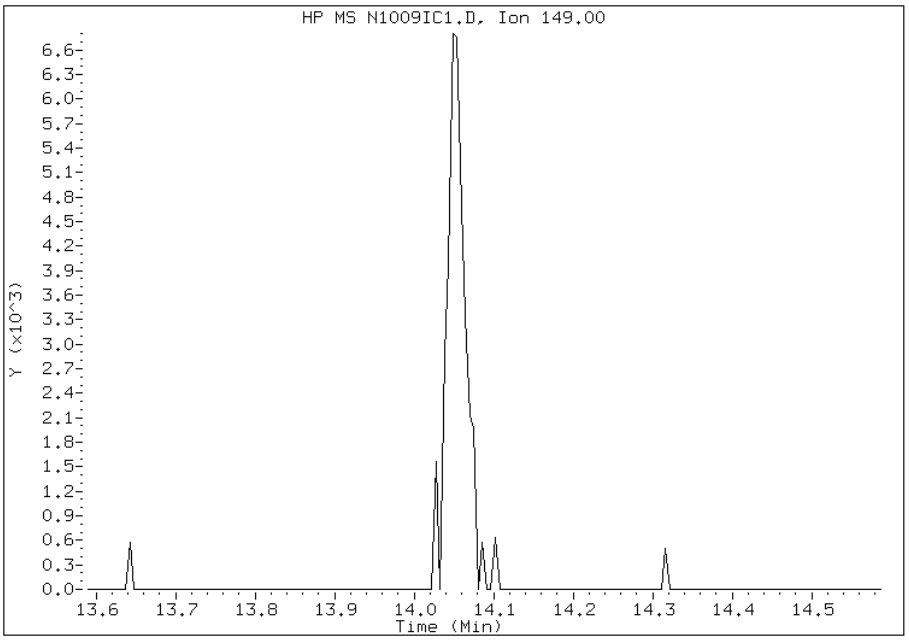
Manual Integration Report

Data File: N1009IC1.D
Inj. Date and Time: 09-OCT-2013 05:24
Instrument ID: 733.i
Client ID:
Compound: 139 bis(2-ethylhexyl)Phthalate
CAS #: 117-81-7
Report Date: 10/09/2013

Processing Integration Results

Not Detected

Expected RT: 14.09



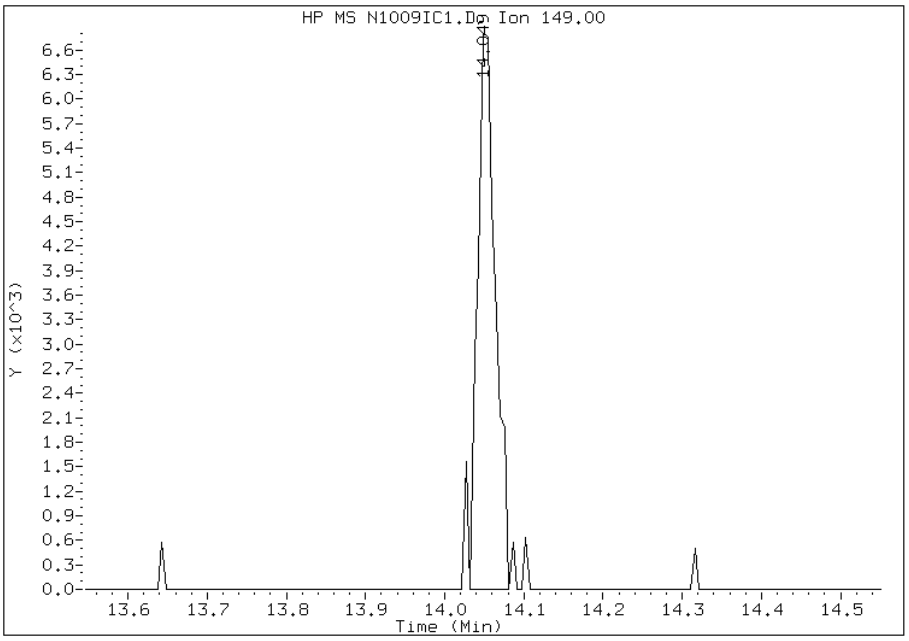
Manual Integration Results

RT: 14.05

Response: 10442

Amount: 0

Conc: 0



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:16
Manual Integration Reason: Peak Not Found

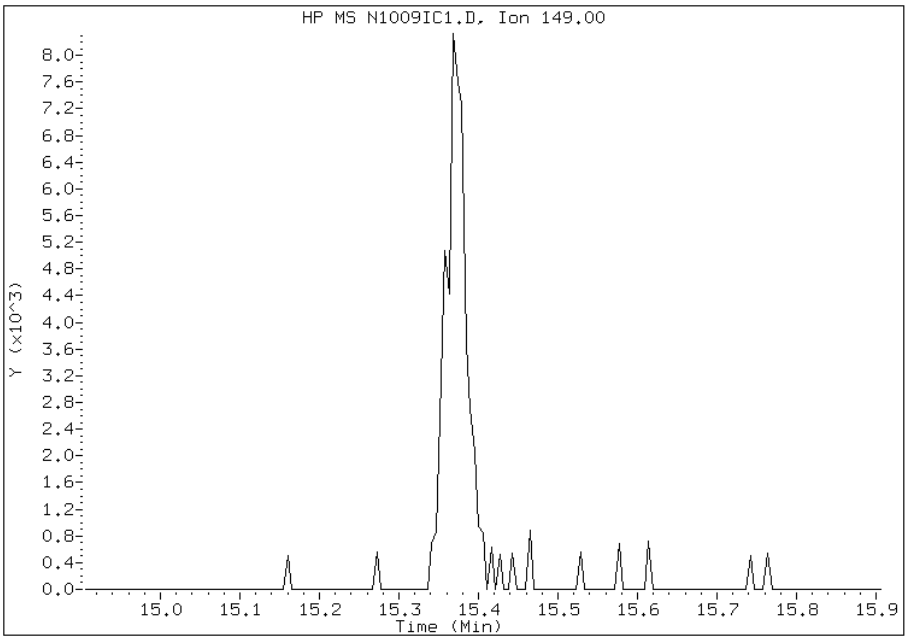
Manual Integration Report

Data File: N1009IC1.D
Inj. Date and Time: 09-OCT-2013 05:24
Instrument ID: 733.i
Client ID:
Compound: 140 Di-n-octylphthalate
CAS #: 117-84-0
Report Date: 10/09/2013

Processing Integration Results

Not Detected

Expected RT: 15.41



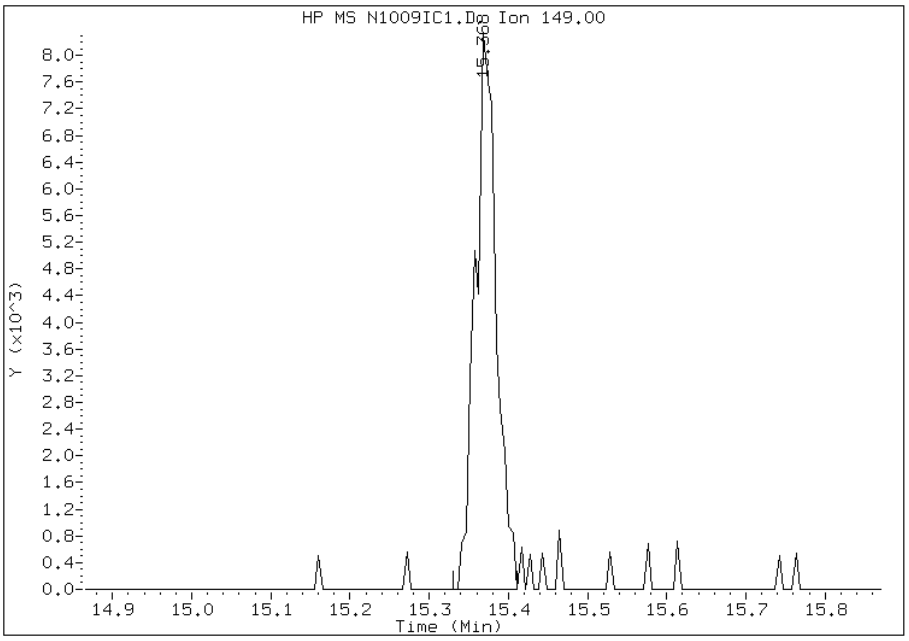
Manual Integration Results

RT: 15.37

Response: 15275

Amount: 0

Conc: 0



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:16
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N1009IC1.D
Inj. Date and Time: 09-OCT-2013 05:24
Instrument ID: 733.i
Client ID:
Compound: 146 Benzo(a)pyrene
CAS #: 50-32-8
Report Date: 10/09/2013

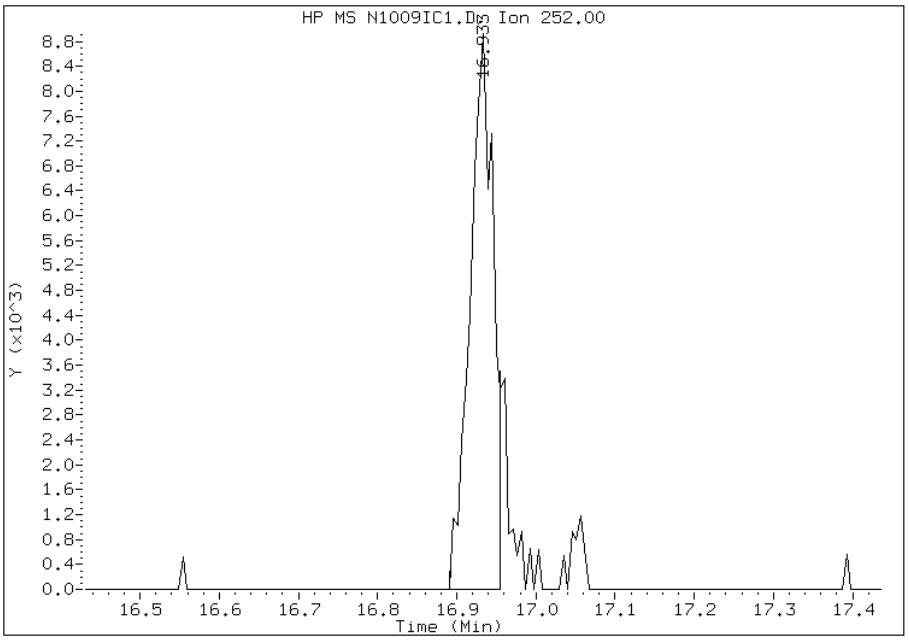
Processing Integration Results

RT: 16.93

Response: 18134

Amount: 0

Conc: 0



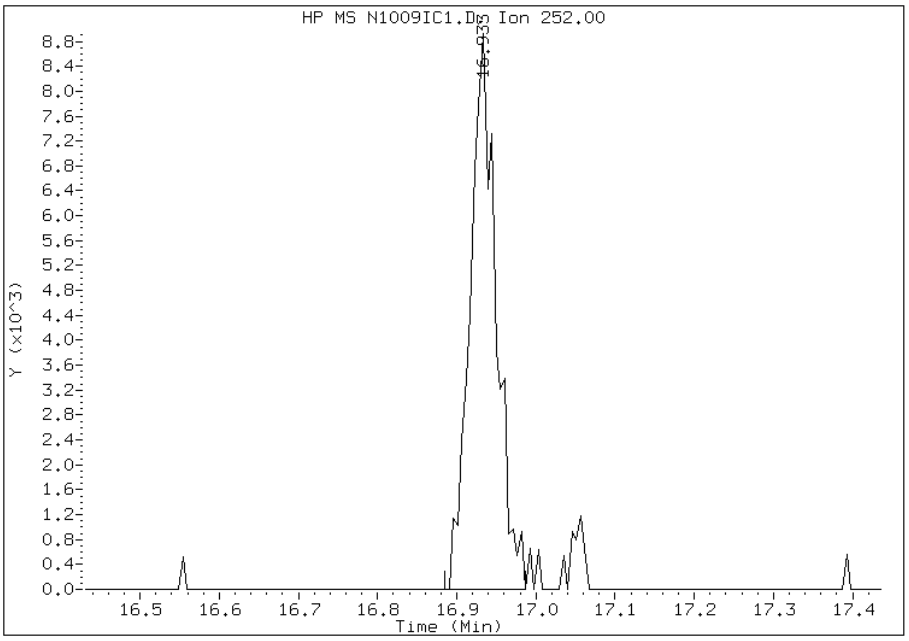
Manual Integration Results

RT: 16.93

Response: 20286

Amount: 0

Conc: 0



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:16
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC1.D
Inj. Date and Time: 09-OCT-2013 05:24
Instrument ID: 733.i
Client ID:
Compound: 149 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 10/09/2013

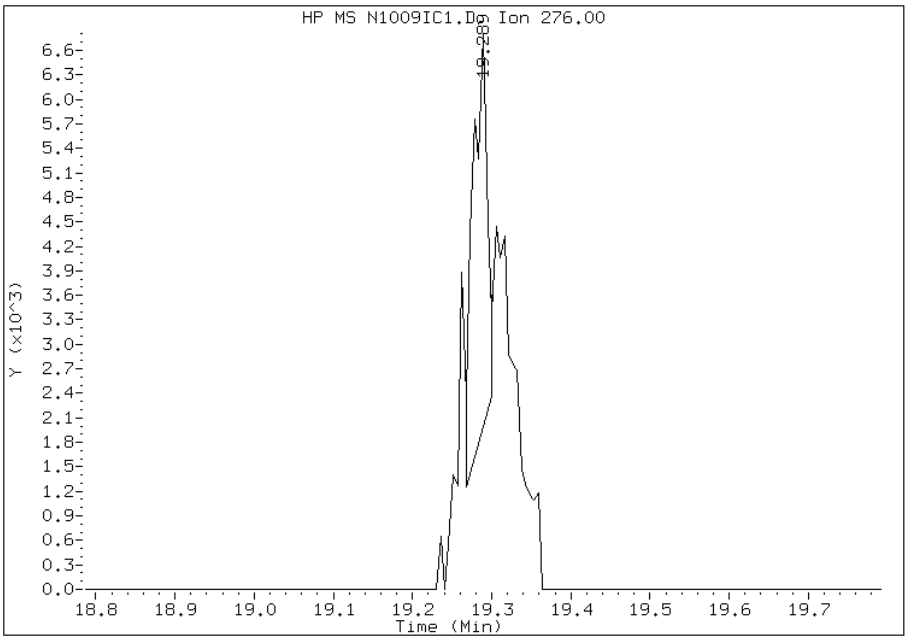
Processing Integration Results

RT: 19.29

Response: 6342

Amount: 0

Conc: 0



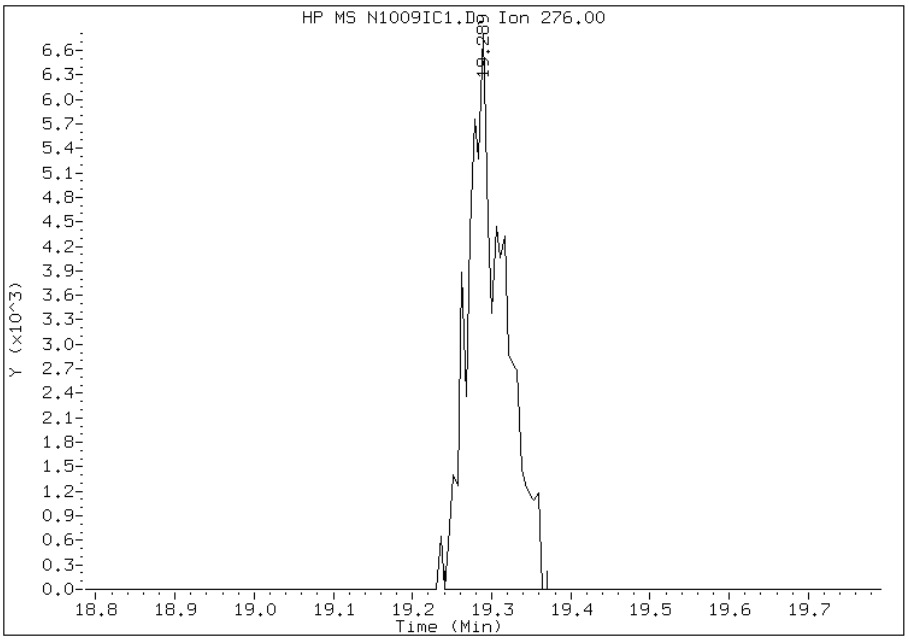
Manual Integration Results

RT: 19.29

Response: 21498

Amount: 0

Conc: 0



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:17
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC1.D
Inj. Date and Time: 09-OCT-2013 05:24
Instrument ID: 733.i
Client ID:
Compound: 150 Dibenz(a,h)anthracene
CAS #: 53-70-3
Report Date: 10/09/2013

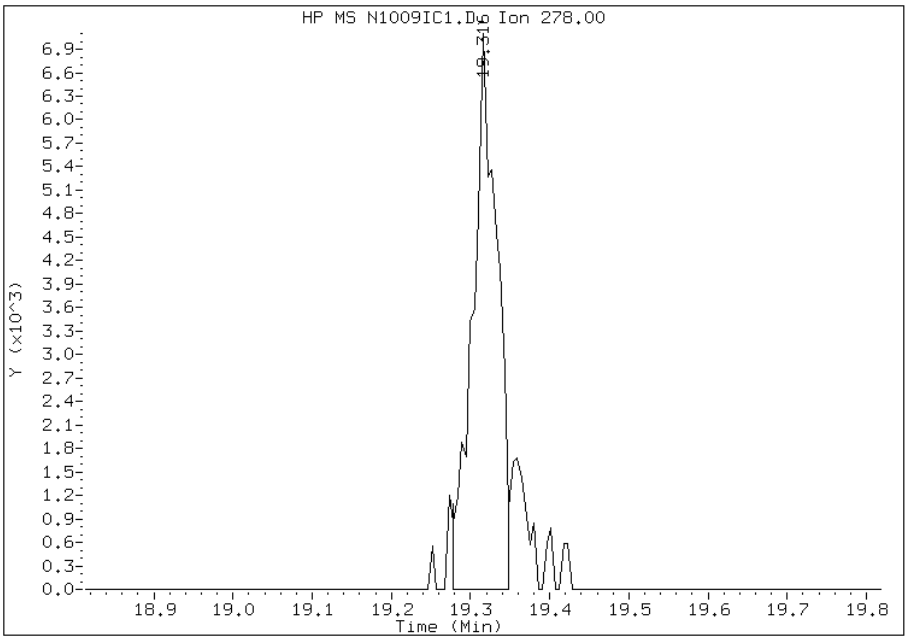
Processing Integration Results

RT: 19.32

Response: 15274

Amount: 0

Conc: 0



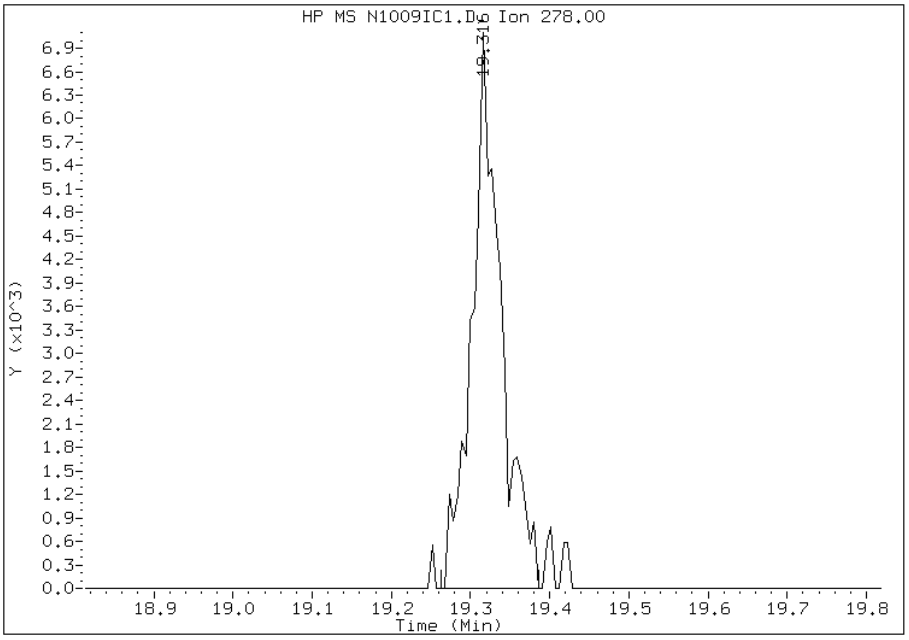
Manual Integration Results

RT: 19.32

Response: 17969

Amount: 0

Conc: 0



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:17
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC1.D
Inj. Date and Time: 09-OCT-2013 05:24
Instrument ID: 733.i
Client ID:
Compound: 151 Benzo(g,h,i)perylene
CAS #: 191-24-2
Report Date: 10/09/2013

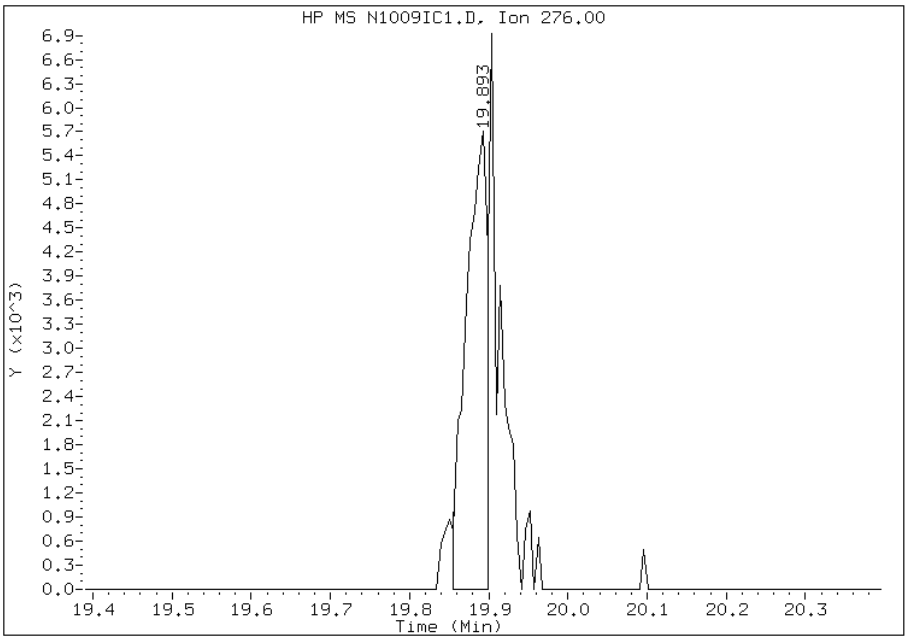
Processing Integration Results

RT: 19.89

Response: 10524

Amount: 0

Conc: 0



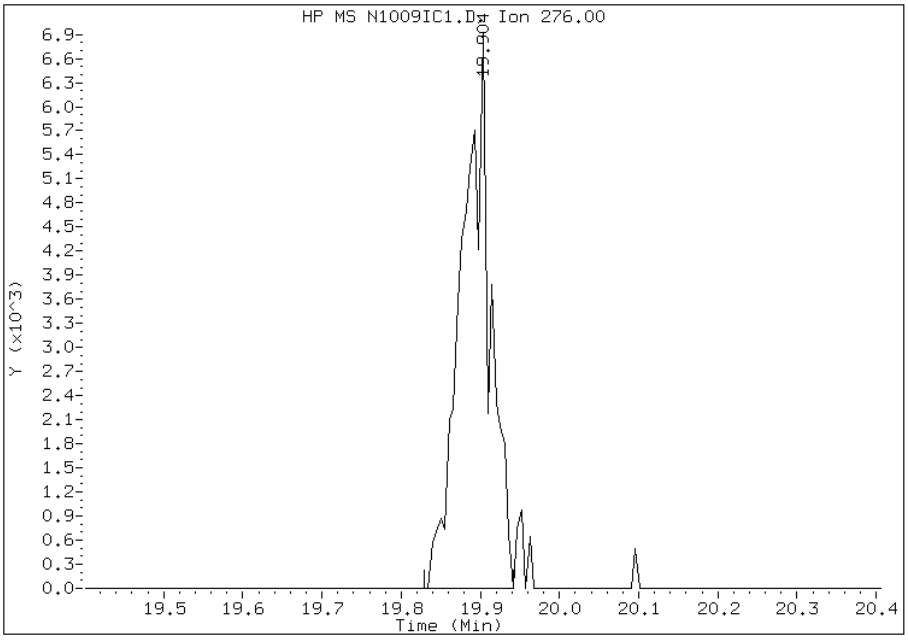
Manual Integration Results

RT: 19.90

Response: 17517

Amount: 0

Conc: 0



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:17
Manual Integration Reason: Poor Chromatography

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN100913D.b\N1009IC2.D
Lab Smp Id: IC 839799
Inj Date : 09-OCT-2013 05:49
Operator : 3200 Inst ID: 733.i
Smp Info : IC 839799
Misc Info : TN100913D.b,T8270d.m,tapitt.sub
Comment :
Method : \\PITSVR06\D\chem\733.i\TN100913D.b\T8270d.m
Meth Date : 08-Oct-2013 08:32 piccolinov Quant Type: ISTD
Cal Date : 09-OCT-2013 05:49 Cal File: N1009IC2.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: tapitt.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 1	1,4-Dichlorobenzene-d4	152	6.252	6.252	(1.000)	154058	8.00000	
* 2	Naphthalene-d8	136	7.481	7.481	(1.000)	530530	8.00000	
* 3	Acenaphthene-d10	164	9.137	9.137	(1.000)	300483	8.00000	
* 4	Phenanthrene-d10	188	10.531	10.531	(1.000)	494826	8.00000	
* 5	Chrysene-d12	240	14.116	14.116	(1.000)	478974	8.00000	
* 6	Perylene-d12	264	17.070	17.070	(1.000)	361167	8.00000	
198	1,4-Dioxane	88	1.695	1.695	(0.271)	20460	2.00000	1.9544(M)
10	N-Nitrosodimethylamine	74	2.336	2.336	(0.374)	23923	2.00000	2.0885(M)
9	Pyridine	79	2.411	2.411	(0.386)	44989	2.00000	2.5607(M)
16	Methyl methanesulfonate	80	4.623	4.623	(0.739)	28035	2.00000	1.8736
206	Benzaldehyde	77	5.798	5.798	(0.927)	35767	2.00000	1.8043
21	Aniline	93	5.915	5.915	(0.946)	64985	2.00000	1.9235
22	Phenol	94	5.899	5.899	(0.944)	60710	2.00000	1.7894
23	bis(2-Chloroethyl)ether	93	5.985	5.985	(0.957)	39846	2.00000	1.9627
24	2-Chlorophenol	128	6.038	6.038	(0.966)	50685	2.00000	1.9700
226	n-Decane	43	6.102	6.102	(0.976)	37130	2.00000	1.9763
26	1,3-Dichlorobenzene	146	6.193	6.193	(0.991)	58623	2.00000	2.0137
27	1,4-Dichlorobenzene	146	6.268	6.268	(1.003)	60757	2.00000	1.9103
28	1,2-Dichlorobenzene	146	6.418	6.418	(1.026)	56160	2.00000	1.8896
217	Indene	116	6.508	6.508	(1.041)	78236	2.00000	1.9107
29	Benzyl Alcohol	108	6.380	6.380	(1.021)	25922	2.00000	1.9154
30	2-Methylphenol	108	6.492	6.492	(1.038)	40363	2.00000	1.8696
31	2,2'-oxybis(1-Chloropropane)	45	6.519	6.519	(1.043)	43754	2.00000	1.9053
37	Acetophenone	105	6.637	6.637	(1.062)	66100	2.00000	1.6606
32	N-Nitroso-di-n-propylamine	70	6.637	6.637	(1.062)	28933	2.00000	1.9263
192	4-Methylphenol	108	6.637	6.637	(1.062)	39567	2.00000	1.8612
34	Hexachloroethane	117	6.754	6.754	(1.080)	21964	2.00000	1.8498
77	1,3-Dinitrobenzene	168	8.880	8.880	(0.972)	13472	2.00000	2.1681
35	Nitrobenzene	77	6.802	6.802	(0.909)	47540	2.00000	1.9618

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
36	N-Nitrosopyrrolidine	100	6.604	6.604	(1.056)	16800	2.00000	1.8261
41	Isophorone	82	7.027	7.027	(0.939)	73606	2.00000	2.0361
42	2-Nitrophenol	139	7.112	7.112	(0.951)	22566	2.00000	1.8921
43	2,4-Dimethylphenol	107	7.139	7.139	(0.954)	37515	2.00000	1.8318
44	bis(2-Chloroethoxy)methane	93	7.224	7.224	(0.966)	46964	2.00000	2.0360
48	2,4-Dichlorophenol	162	7.336	7.336	(0.981)	40376	2.00000	1.9473
49	Benzoic Acid	122	7.187	7.187	(0.961)	12268	4.00000	4.2958(M)
50	1,2,4-Trichlorobenzene	180	7.422	7.422	(0.992)	52730	2.00000	2.0644
51	Naphthalene	128	7.497	7.497	(1.002)	135581	2.00000	1.9202
52	4-Chloroaniline	127	7.539	7.539	(1.008)	53034	2.00000	1.9762
54	2,6-Dichlorophenol	162	7.555	7.555	(1.010)	39095	2.00000	1.9587
56	Hexachlorobutadiene	225	7.619	7.619	(1.019)	36985	2.00000	2.0599
208	Caprolactam	113	7.828	7.828	(1.046)	9793	2.00000	2.4176
59	4-Chloro-3-Methylphenol	107	7.983	7.983	(1.067)	34664	2.00000	1.8781
62	2-Methylnaphthalene	142	8.154	8.154	(1.090)	92608	2.00000	1.9436
63	1-Methylnaphthalene	142	8.250	8.250	(1.103)	88821	2.00000	1.9960
64	Hexachlorocyclopentadiene	237	8.309	8.309	(0.909)	31944	2.00000	1.9565
65	1,2,4,5-Tetrachlorobenzene	216	8.314	8.314	(0.910)	54913	2.00000	1.8967
66	2,4,6-Trichlorophenol	196	8.410	8.410	(0.920)	28285	2.00000	1.8561
67	2,4,5-Trichlorophenol	196	8.448	8.448	(0.925)	32231	2.00000	2.0481
209	1,1'-Biphenyl	154	8.581	8.581	(0.939)	111373	2.00000	1.8788
70	2-Chloronaphthalene	162	8.613	8.613	(0.943)	97316	2.00000	1.8690
73	2-Nitroaniline	65	8.688	8.688	(0.951)	20770	2.00000	2.1520
76	Dimethylphthalate	163	8.848	8.848	(0.968)	94720	2.00000	1.9604
78	2,6-Dinitrotoluene	165	8.907	8.907	(0.975)	20117	2.00000	2.1141
79	Acenaphthylene	152	9.003	9.003	(0.985)	129869	2.00000	1.9860
81	3-Nitroaniline	138	9.067	9.067	(0.992)	20183	2.00000	2.0068
82	Acenaphthene	153	9.169	9.169	(1.004)	87147	2.00000	1.9256
83	2,4-Dinitrophenol	184	9.174	9.174	(1.004)	9240	4.00000	5.3632(M)
85	4-Nitrophenol	109	9.206	9.206	(1.008)	21252	4.00000	4.5230
86	Dibenzofuran	168	9.324	9.324	(1.020)	124075	2.00000	1.9694
87	2,4-Dinitrotoluene	165	9.286	9.286	(1.016)	25039	2.00000	2.2236
91	2,3,5,6-Tetrachlorophenol	232	9.404	9.404	(1.029)	21712	2.00000	2.2309
88	2,3,4,6-Tetrachlorophenol	232	9.436	9.436	(1.033)	26457	2.00000	1.9910(M)
92	2-Naphthylamine	143	9.463	9.463	(1.036)	72935	2.00000	2.0666
93	Diethylphthalate	149	9.495	9.495	(1.039)	85985	2.00000	1.9407
230	n-Hexadecane	57	9.505	9.505	(1.271)	40097	2.00000	2.0028
94	Fluorene	166	9.649	9.649	(1.056)	96456	2.00000	1.9382
95	4-Chlorophenyl-phenylether	204	9.628	9.628	(1.054)	54833	2.00000	1.9811
96	4-Nitroaniline	138	9.639	9.639	(1.055)	18637	2.00000	1.9757
98	4,6-Dinitro-2-methylphenol	198	9.676	9.676	(0.919)	20869	4.00000	4.7432(M)
99	N-Nitrosodiphenylamine (1)	169	9.735	9.735	(0.924)	65002	2.00000	2.0449
100	1,2-Diphenylhydrazine	77	9.778	9.778	(0.928)	82589	2.00000	2.0733
106	4-Bromophenyl-phenylether	248	10.088	10.088	(0.958)	32674	2.00000	2.0100
107	Hexachlorobenzene	284	10.173	10.173	(0.966)	29631	2.00000	1.9488
210	Atrazine	200	10.205	10.205	(0.969)	26345	2.00000	2.0248
227	n-Octadecane	57	10.349	10.349	(1.655)	38211	2.00000	1.8069
111	Pentachlorophenol	266	10.349	10.349	(0.983)	26128	4.00000	4.0243(M)
115	Phenanthrene	178	10.552	10.552	(1.002)	131904	2.00000	1.9493
116	Anthracene	178	10.600	10.600	(1.007)	133933	2.00000	1.9838
119	Carbazole	167	10.745	10.745	(1.020)	113049	2.00000	1.9084
120	Di-n-Butylphthalate	149	11.049	11.049	(1.049)	121153	2.00000	1.9954
123	Fluoranthene	202	11.872	11.872	(1.127)	147450	2.00000	1.9781
124	Benzidine	184	11.995	11.995	(0.850)	45411	2.00000	2.8092(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
125 Pyrene	202	12.171	12.171	(0.862)	147089	2.00000	1.9313
131 Butylbenzylphthalate	149	13.052	13.052	(0.925)	43805	2.00000	1.8858
135 3,3'-Dichlorobenzidine	252	14.025	14.025	(0.994)	38651	2.00000	1.9659
136 Benzo(a)Anthracene	228	14.094	14.094	(0.998)	130502	2.00000	1.8264
137 Chrysene	228	14.164	14.164	(1.003)	125915	2.00000	2.0292
139 bis(2-ethylhexyl)Phthalate	149	14.067	14.067	(0.997)	52936	2.00000	2.0380
140 Di-n-octylphthalate	149	15.387	15.387	(0.901)	78029	2.00000	2.0148(M)
141 Benzo(b)fluoranthene	252	16.258	16.258	(0.952)	117127	2.00000	1.9865
142 Benzo(k)fluoranthene	252	16.316	16.316	(0.956)	121898	2.00000	1.8965(M)
143 7,12-dimethylbenz[a]anthracen	256	16.247	16.247	(0.952)	45933	2.00000	2.0681(M)
146 Benzo(a)pyrene	252	16.952	16.952	(0.993)	107699	2.00000	2.0534(M)
149 Indeno(1,2,3-cd)pyrene	276	19.308	19.308	(1.131)	104927	2.00000	1.9693(M)
150 Dibenz(a,h)anthracene	278	19.345	19.345	(1.133)	87476	2.00000	1.9667(M)
151 Benzo(g,h,i)perylene	276	19.922	19.922	(1.167)	86030	2.00000	1.9755(M)
$ 154 Nitrobenzene-d5	82	6.786	6.786	(0.907)	47330	2.00000	2.0270
$ 155 2-Fluorobiphenyl	172	8.485	8.485	(0.929)	109347	2.00000	2.0054
$ 156 Terphenyl-d14	244	12.337	12.337	(0.874)	107398	2.00000	1.8564
$ 157 Phenol-d5	99	5.889	5.889	(0.942)	53289	2.00000	1.9558
$ 158 2-Fluorophenol	112	4.863	4.863	(0.778)	45407	2.00000	2.0910
$ 159 2,4,6-Tribromophenol	330	9.874	9.874	(0.938)	9837	2.00000	2.1772

QC Flag Legend

M - Compound response manually integrated.

Data File: N1009IC2.D

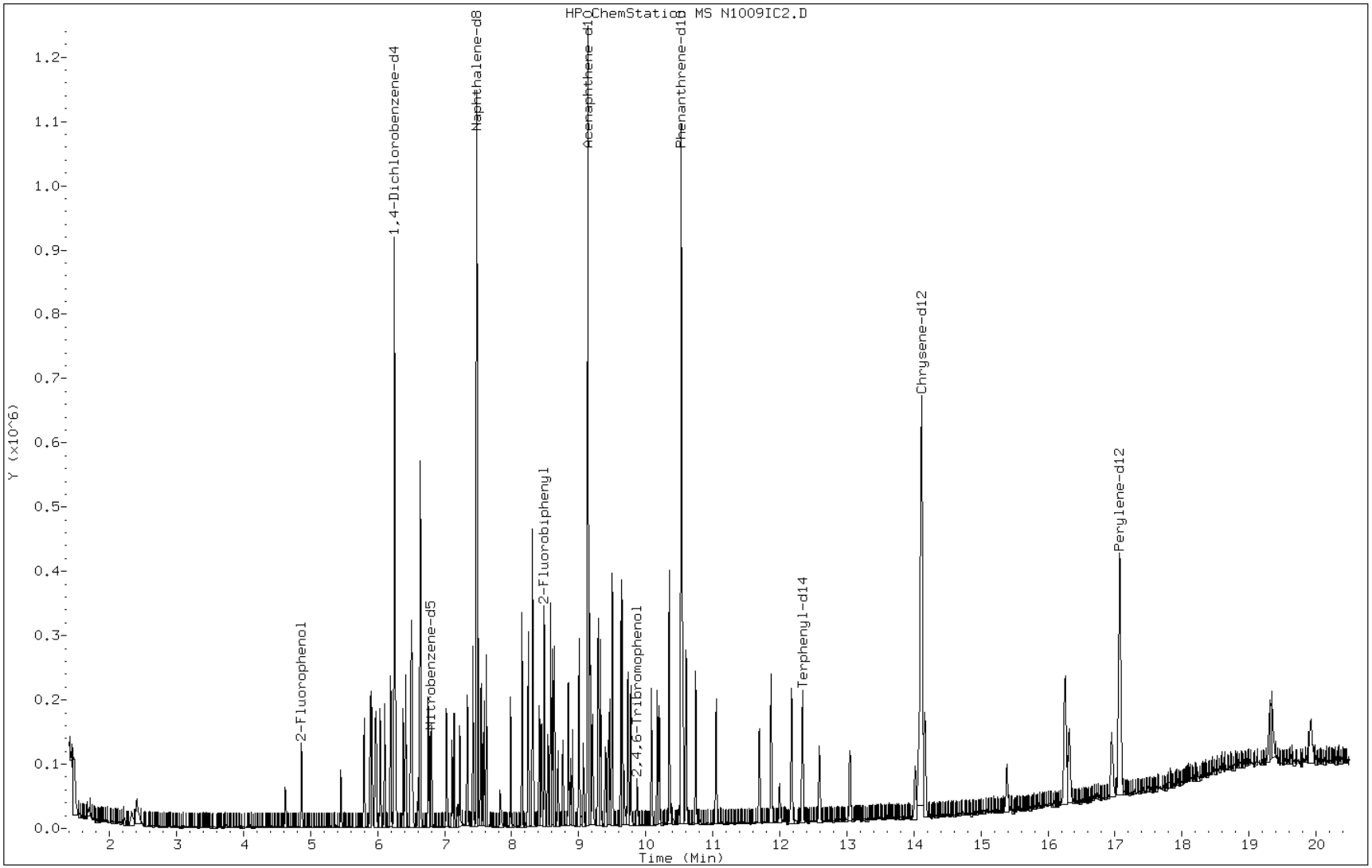
Date: 09-OCT-2013 05:49

Client ID:

Instrument: 733.i

Sample Info: IC 839799

Operator: 3200



Manual Integration Report

Data File: N1009IC2.D
Inj. Date and Time: 09-OCT-2013 05:49
Instrument ID: 733.i
Client ID:
Compound: 198 1,4-Dioxane
CAS #: 123-91-1
Report Date: 10/09/2013

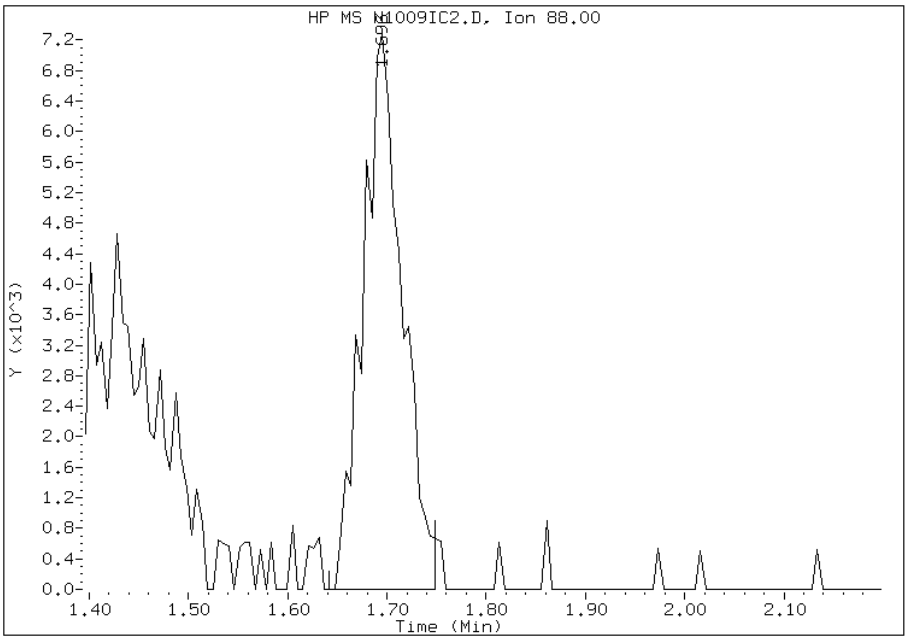
Processing Integration Results

RT: 1.70

Response: 20256

Amount: 2

Conc: 2



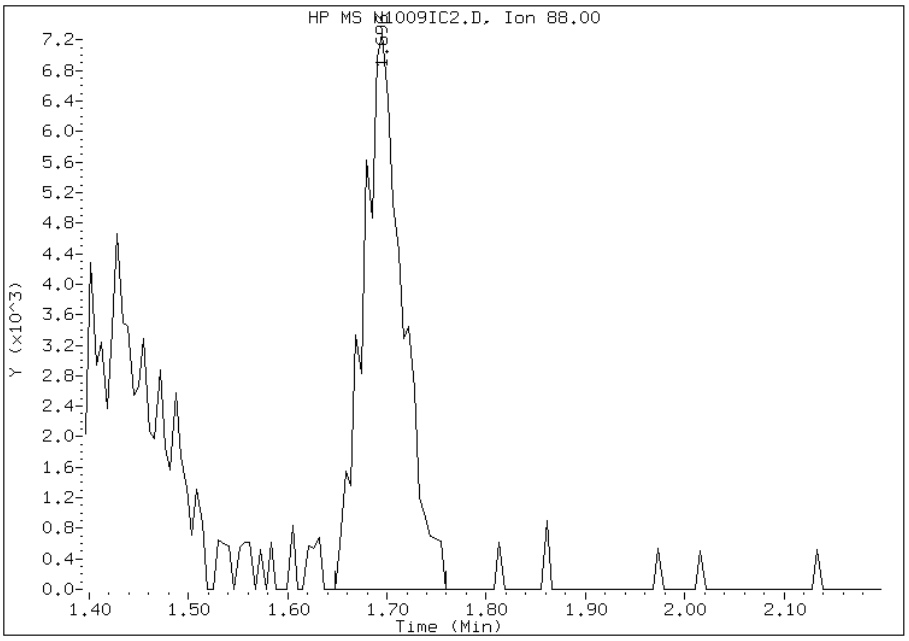
Manual Integration Results

RT: 1.70

Response: 20460

Amount: 2

Conc: 2



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:17
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC2.D
Inj. Date and Time: 09-OCT-2013 05:49
Instrument ID: 733.i
Client ID:
Compound: 10 N-Nitrosodimethylamine
CAS #: 62-75-9
Report Date: 10/09/2013

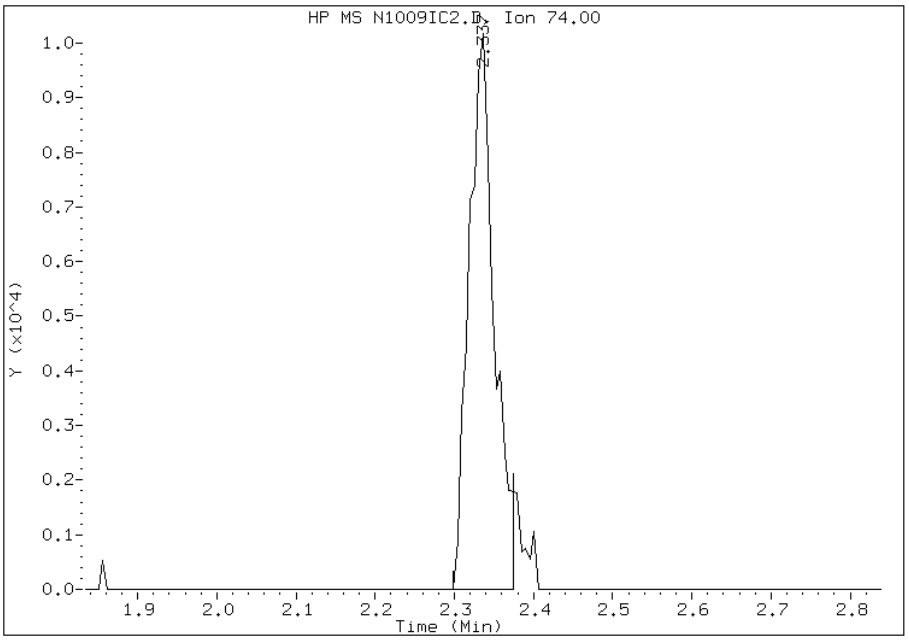
Processing Integration Results

RT: 2.34

Response: 22378

Amount: 2

Conc: 2



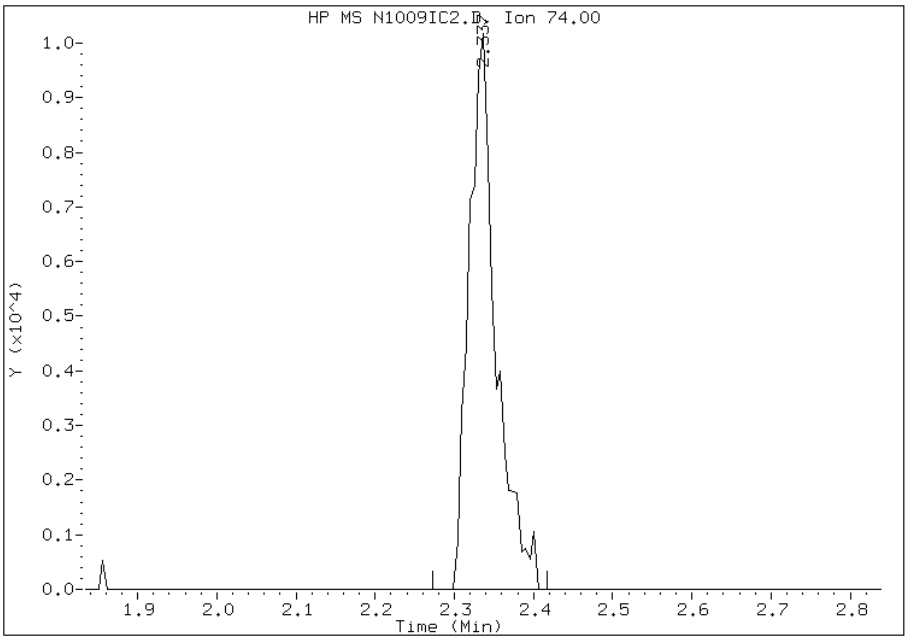
Manual Integration Results

RT: 2.34

Response: 23923

Amount: 2

Conc: 2



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:17
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC2.D
Inj. Date and Time: 09-OCT-2013 05:49
Instrument ID: 733.i
Client ID:
Compound: 9 Pyridine
CAS #: 110-86-1
Report Date: 10/09/2013

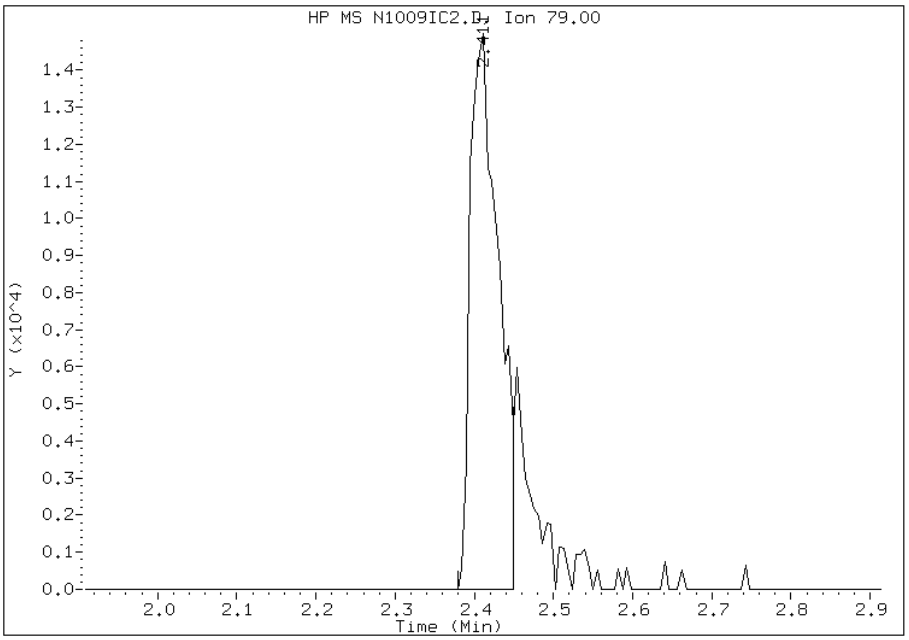
Processing Integration Results

RT: 2.41

Response: 37109

Amount: 2

Conc: 2



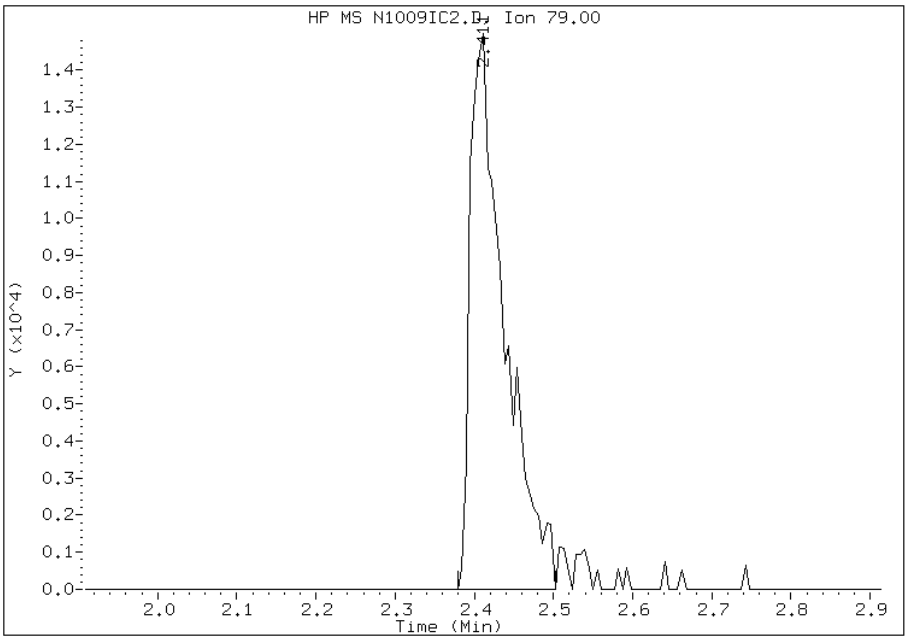
Manual Integration Results

RT: 2.41

Response: 44989

Amount: 3

Conc: 3



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:17
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC2.D
Inj. Date and Time: 09-OCT-2013 05:49
Instrument ID: 733.i
Client ID:
Compound: 49 Benzoic Acid
CAS #: 65-85-0
Report Date: 10/09/2013

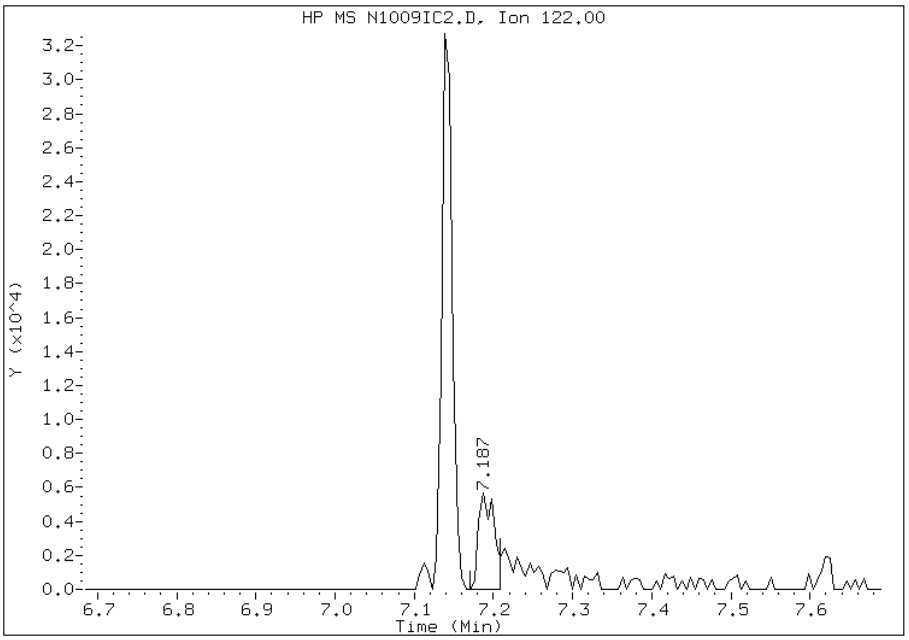
Processing Integration Results

RT: 7.19

Response: 7782

Amount: 1

Conc: 1



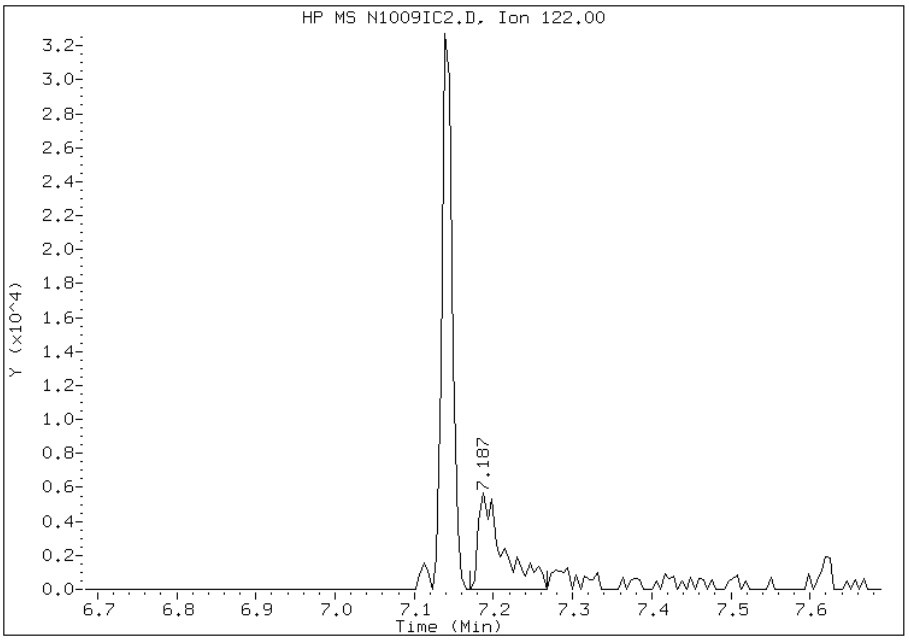
Manual Integration Results

RT: 7.19

Response: 12268

Amount: 4

Conc: 4



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:17
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC2.D
Inj. Date and Time: 09-OCT-2013 05:49
Instrument ID: 733.i
Client ID:
Compound: 83 2,4-Dinitrophenol
CAS #: 51-28-5
Report Date: 10/09/2013

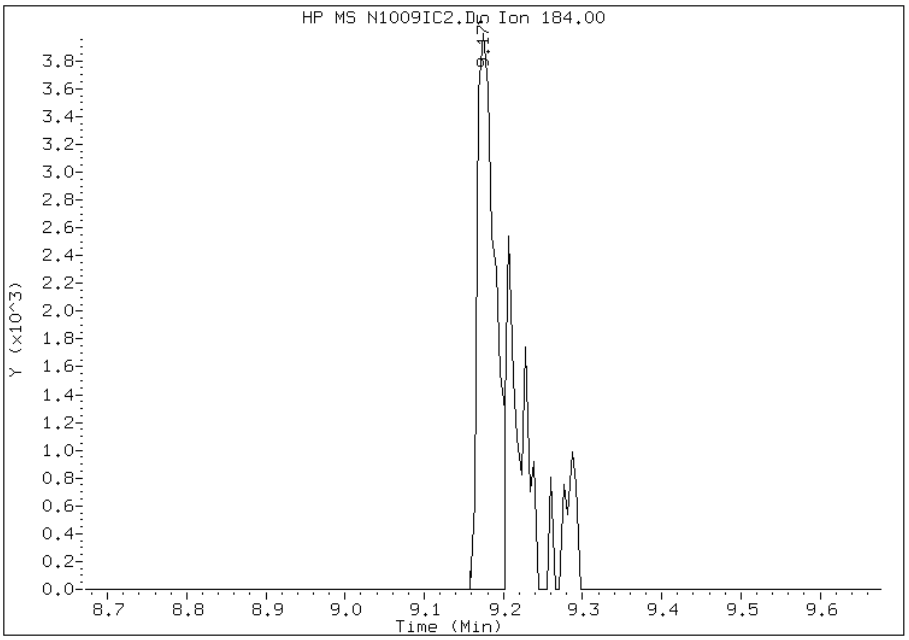
Processing Integration Results

RT: 9.17

Response: 6248

Amount: 2

Conc: 2



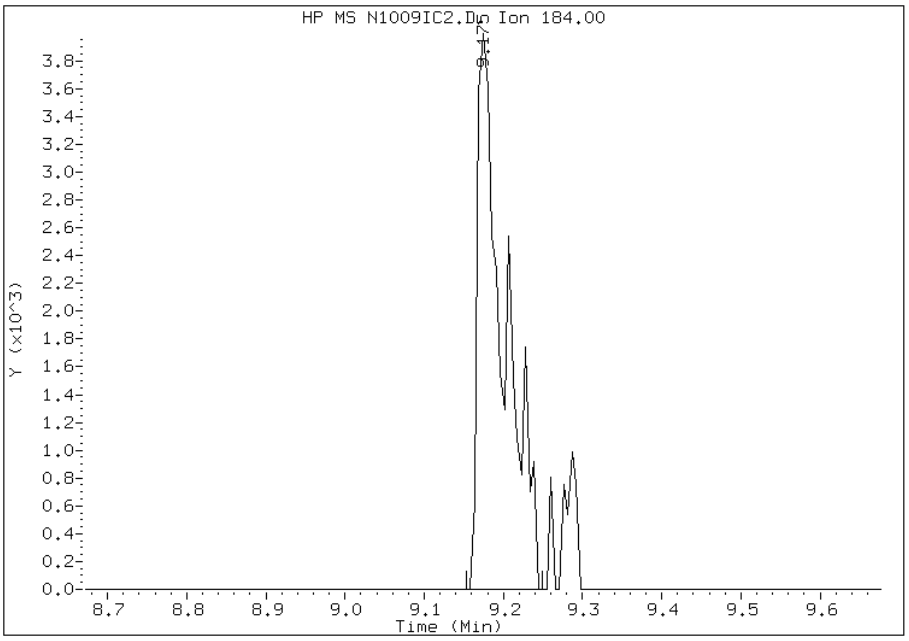
Manual Integration Results

RT: 9.17

Response: 9240

Amount: 5

Conc: 5



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:18
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC2.D
Inj. Date and Time: 09-OCT-2013 05:49
Instrument ID: 733.i
Client ID:
Compound: 88 2,3,4,6-Tetrachlorophenol
CAS #: 58-90-2
Report Date: 10/09/2013

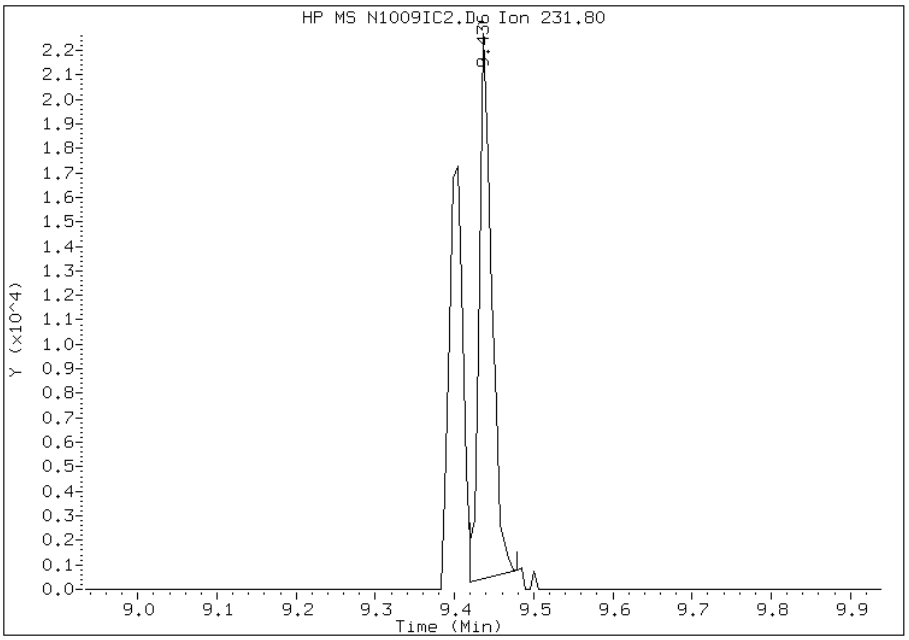
Processing Integration Results

RT: 9.44

Response: 24072

Amount: 2

Conc: 2



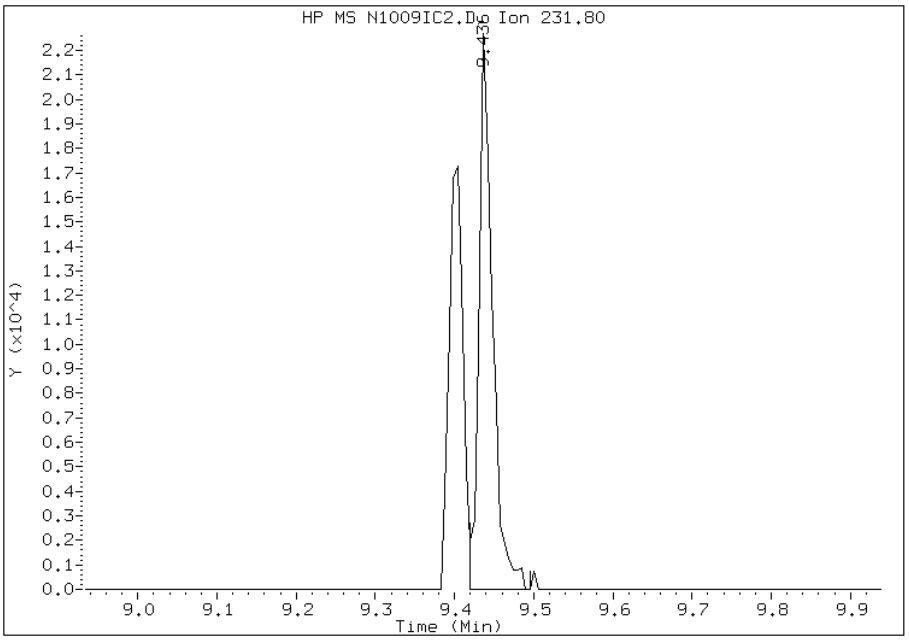
Manual Integration Results

RT: 9.44

Response: 26457

Amount: 2

Conc: 2



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:18
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC2.D
Inj. Date and Time: 09-OCT-2013 05:49
Instrument ID: 733.i
Client ID:
Compound: 98 4,6-Dinitro-2-methylphenol
CAS #: 534-52-1
Report Date: 10/09/2013

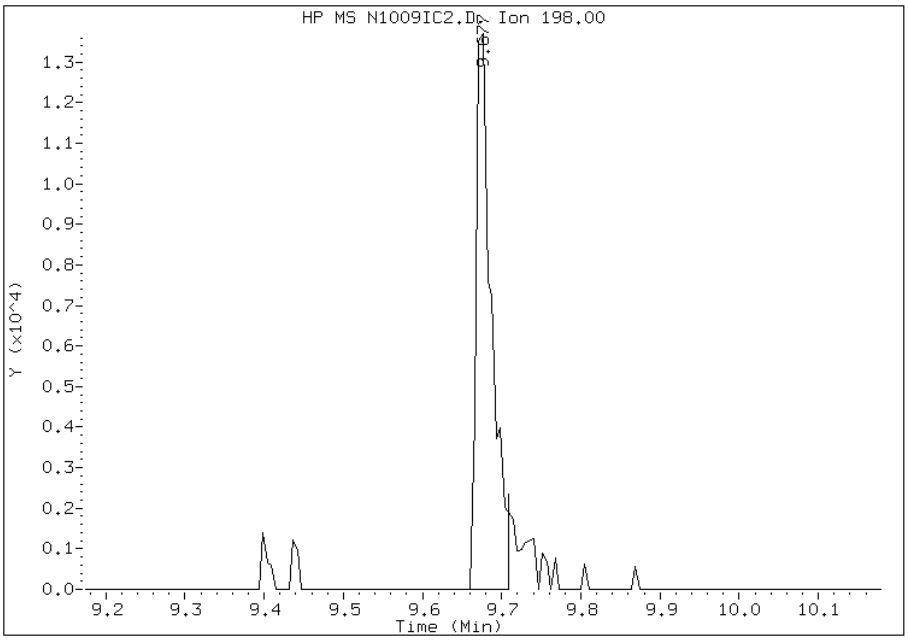
Processing Integration Results

RT: 9.68

Response: 18543

Amount: 3

Conc: 3



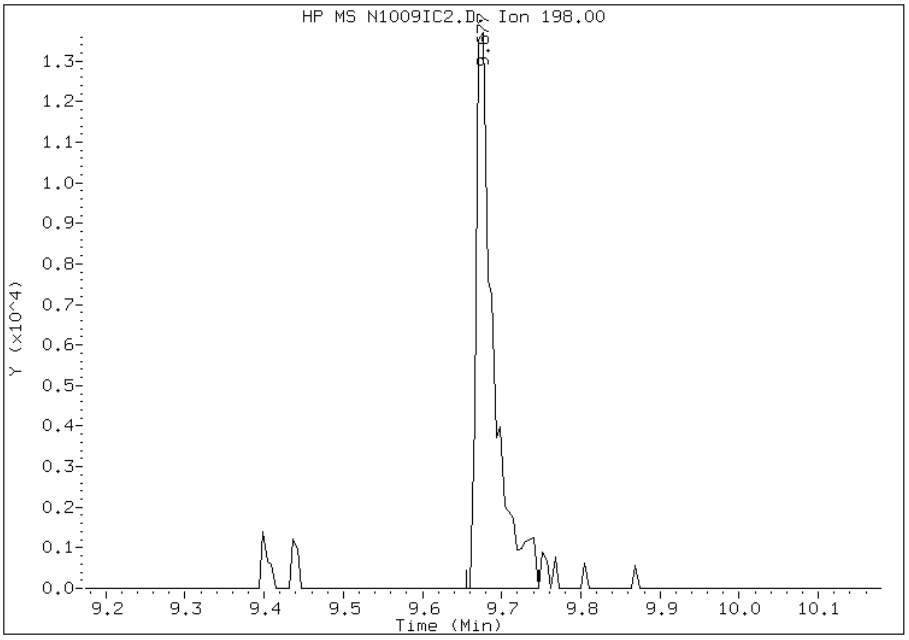
Manual Integration Results

RT: 9.68

Response: 20869

Amount: 5

Conc: 5



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:18
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC2.D
Inj. Date and Time: 09-OCT-2013 05:49
Instrument ID: 733.i
Client ID:
Compound: 111 Pentachlorophenol
CAS #: 87-86-5
Report Date: 10/09/2013

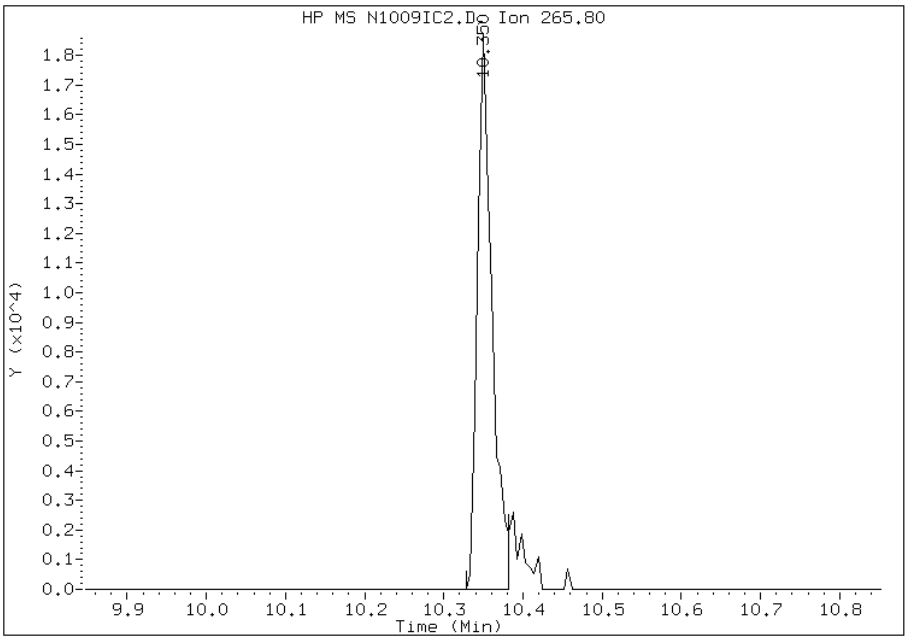
Processing Integration Results

RT: 10.35

Response: 23844

Amount: 3

Conc: 3



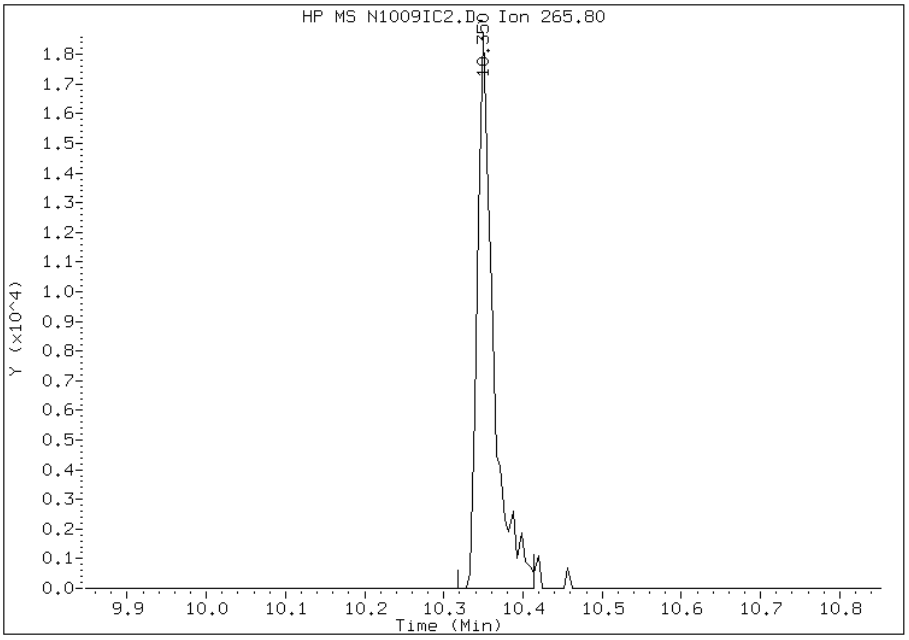
Manual Integration Results

RT: 10.35

Response: 26128

Amount: 4

Conc: 4



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:18
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC2.D
Inj. Date and Time: 09-OCT-2013 05:49
Instrument ID: 733.i
Client ID:
Compound: 124 Benzidine
CAS #: 92-87-5
Report Date: 10/09/2013

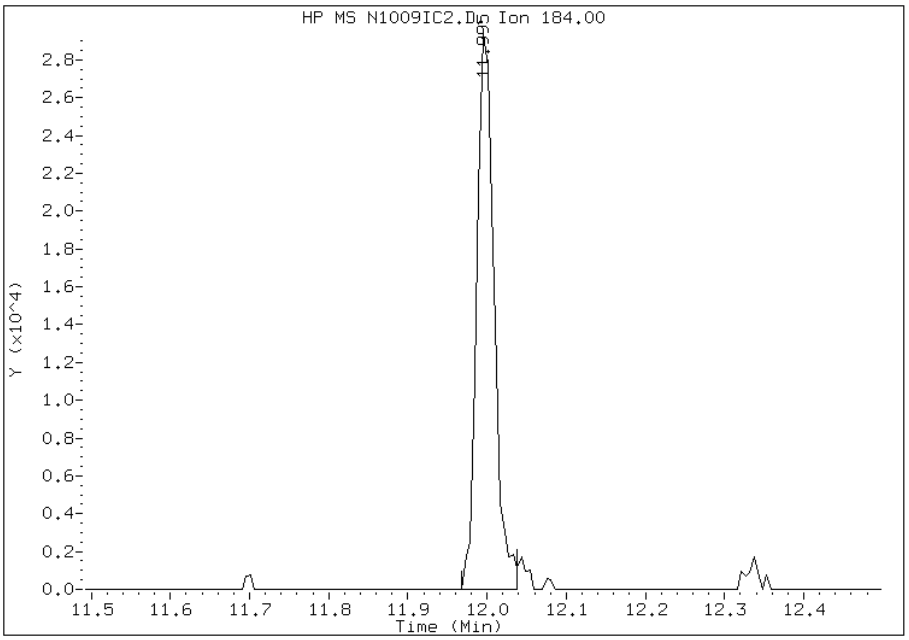
Processing Integration Results

RT: 12.00

Response: 44227

Amount: 2

Conc: 2



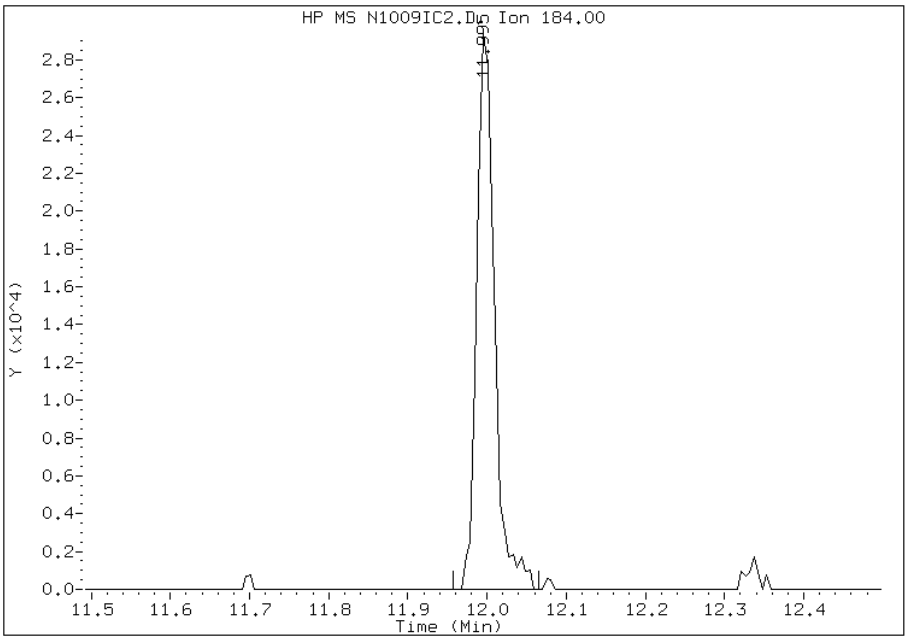
Manual Integration Results

RT: 12.00

Response: 45411

Amount: 3

Conc: 3



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:18
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC2.D
Inj. Date and Time: 09-OCT-2013 05:49
Instrument ID: 733.i
Client ID:
Compound: 140 Di-n-octylphthalate
CAS #: 117-84-0
Report Date: 10/09/2013

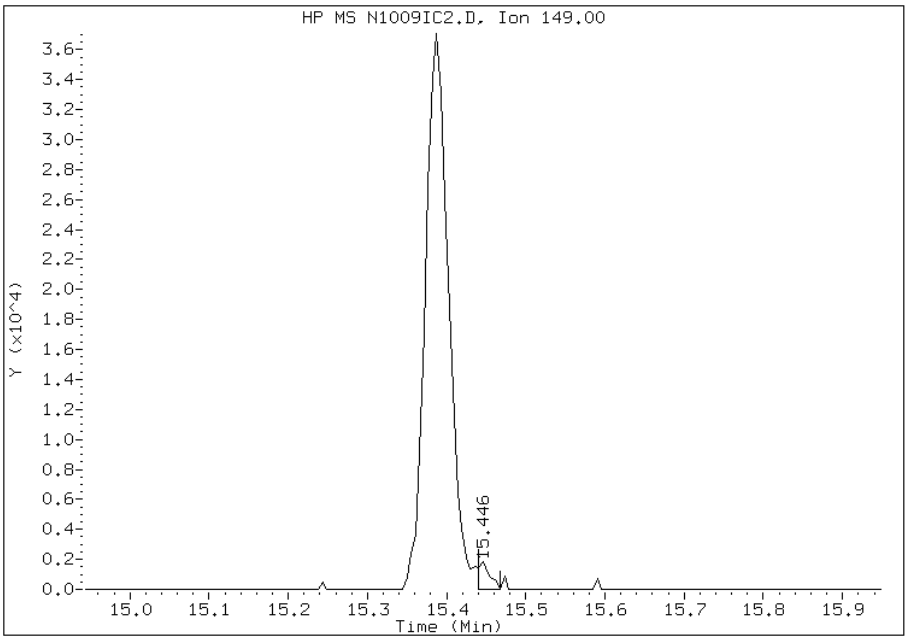
Processing Integration Results

RT: 15.45

Response: 1786

Amount: 0

Conc: 0



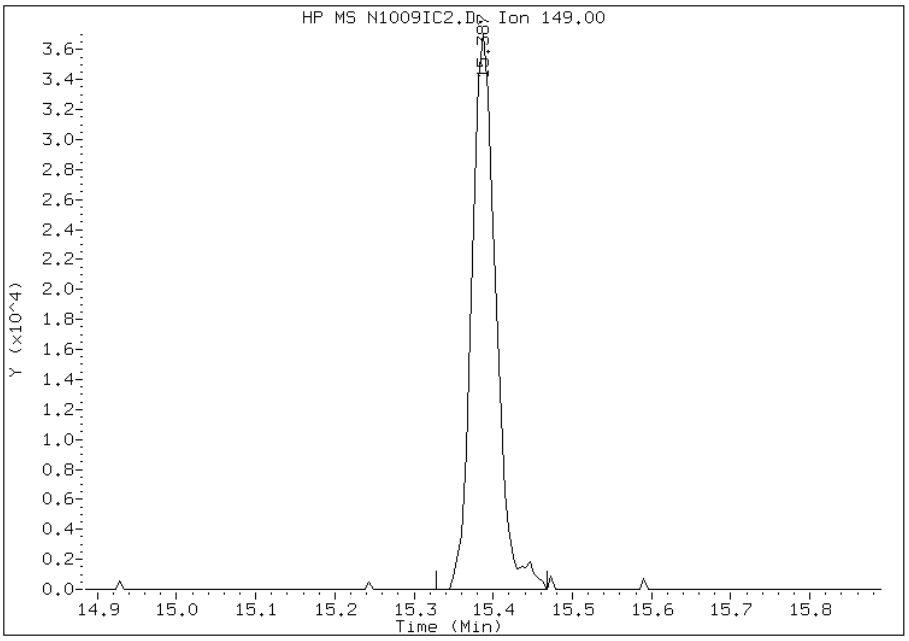
Manual Integration Results

RT: 15.39

Response: 78029

Amount: 2

Conc: 2



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:19
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N1009IC2.D
Inj. Date and Time: 09-OCT-2013 05:49
Instrument ID: 733.i
Client ID:
Compound: 143 7,12-dimethylbenz[a]anthracen
CAS #: 57-97-6
Report Date: 10/09/2013

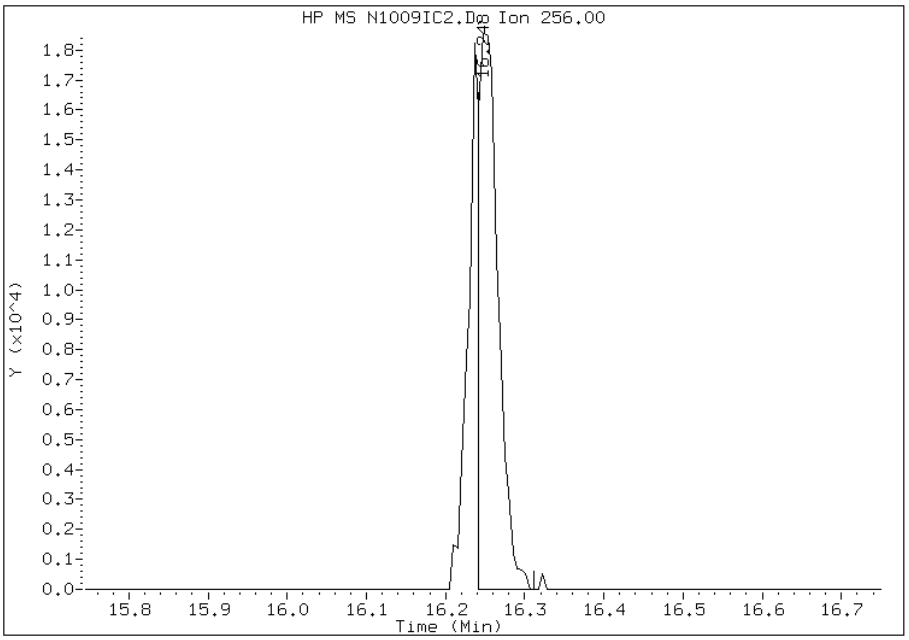
Processing Integration Results

RT: 16.25

Response: 32255

Amount: 1

Conc: 1



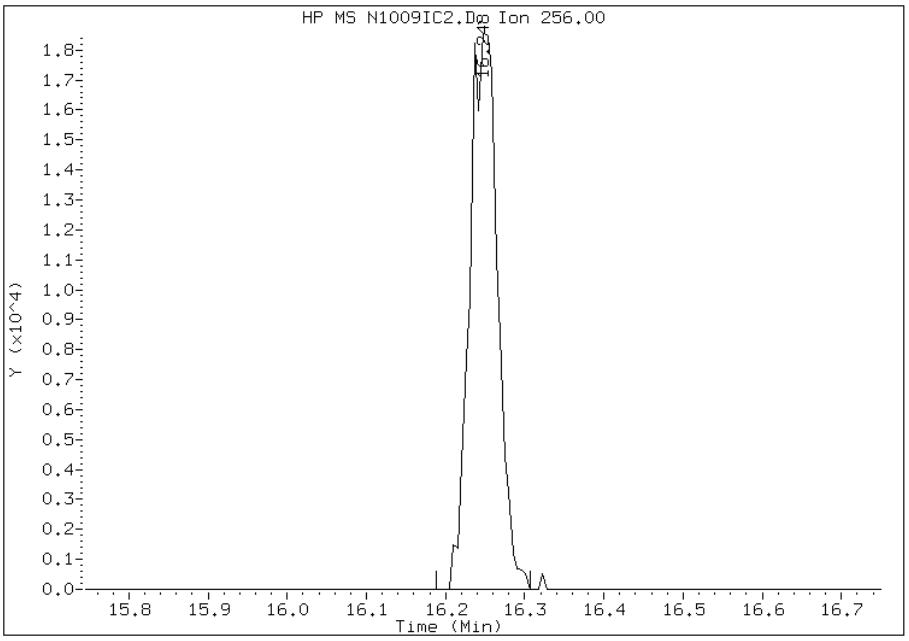
Manual Integration Results

RT: 16.25

Response: 45933

Amount: 2

Conc: 2



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:19
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC2.D
Inj. Date and Time: 09-OCT-2013 05:49
Instrument ID: 733.i
Client ID:
Compound: 142 Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 10/09/2013

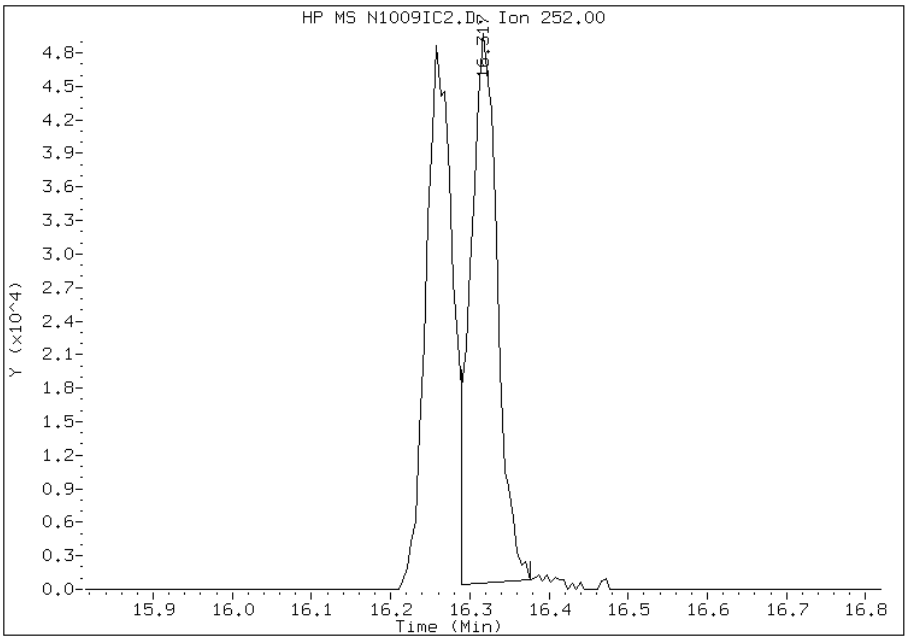
Processing Integration Results

RT: 16.32

Response: 115832

Amount: 2

Conc: 2



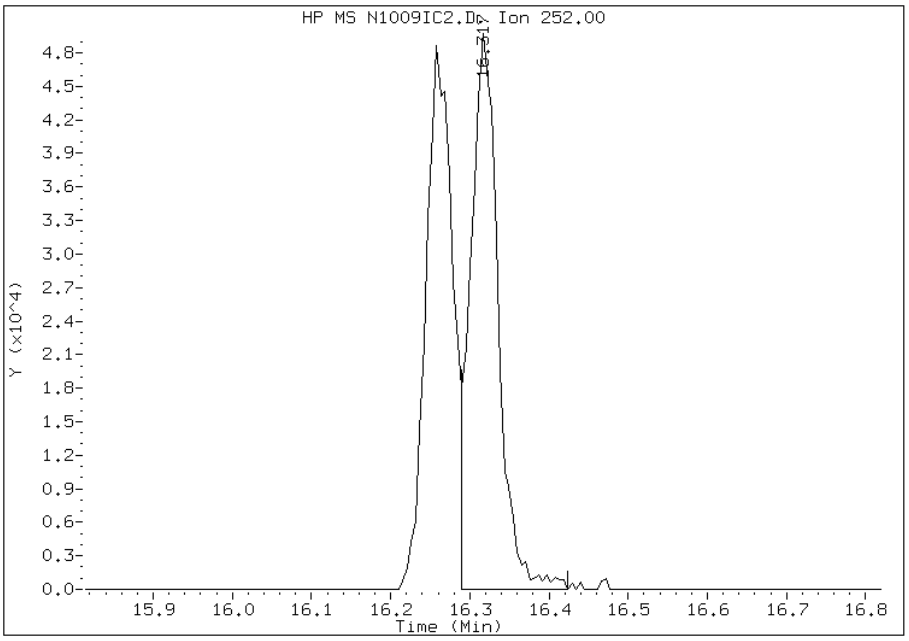
Manual Integration Results

RT: 16.32

Response: 121898

Amount: 2

Conc: 2



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:19
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC2.D
Inj. Date and Time: 09-OCT-2013 05:49
Instrument ID: 733.i
Client ID:
Compound: 146 Benzo(a)pyrene
CAS #: 50-32-8
Report Date: 10/09/2013

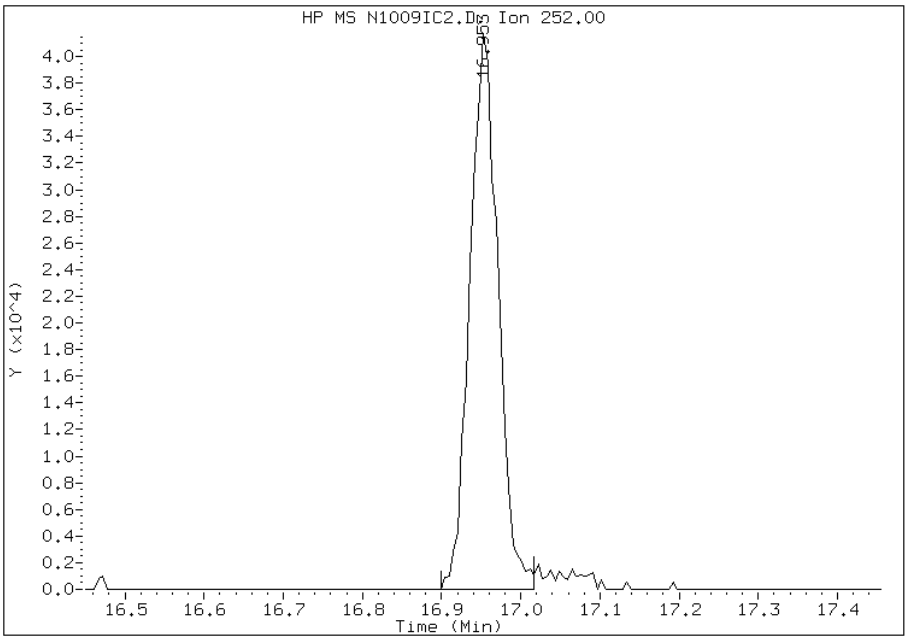
Processing Integration Results

RT: 16.95

Response: 102704

Amount: 2

Conc: 2



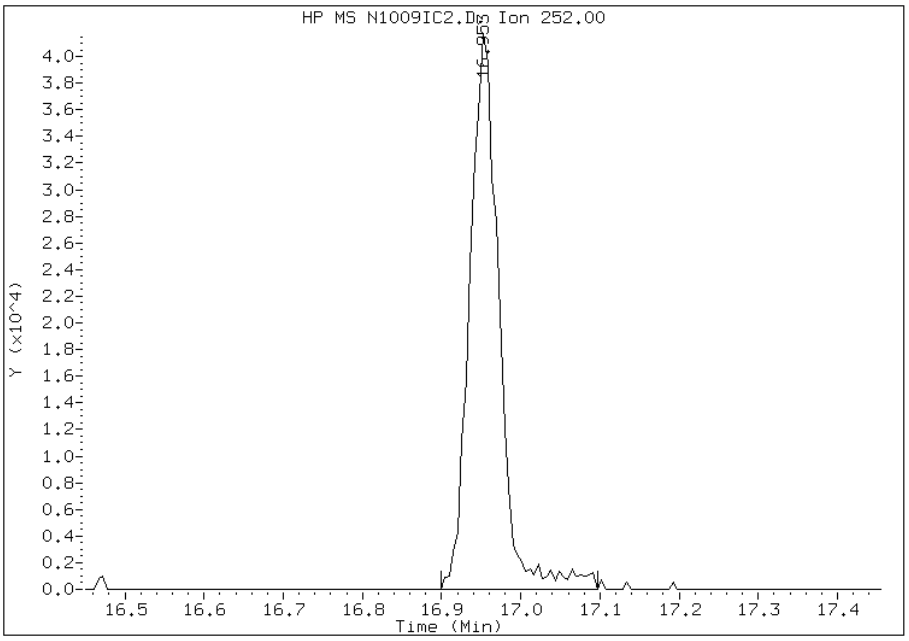
Manual Integration Results

RT: 16.95

Response: 107699

Amount: 2

Conc: 2



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:19
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC2.D
Inj. Date and Time: 09-OCT-2013 05:49
Instrument ID: 733.i
Client ID:
Compound: 149 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 10/09/2013

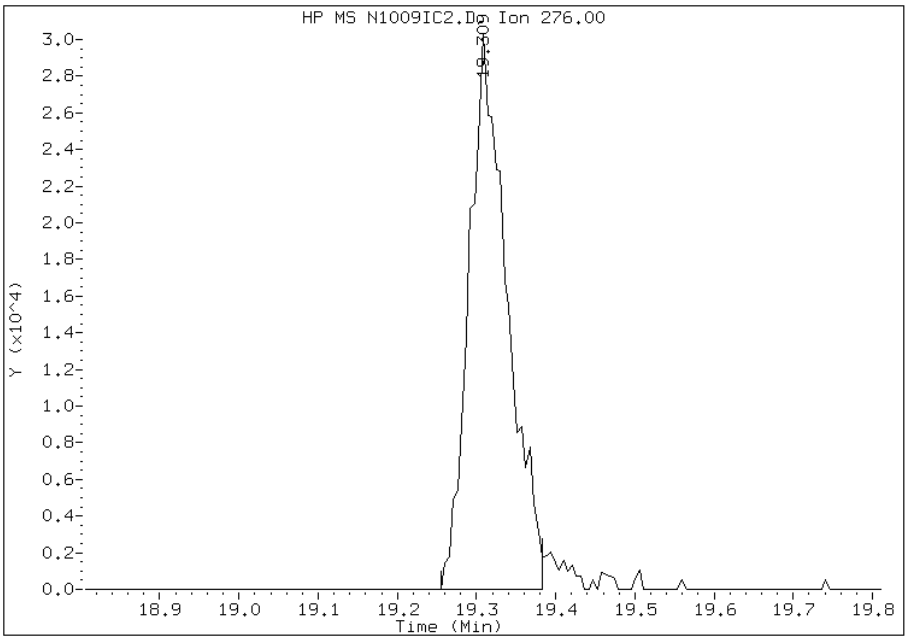
Processing Integration Results

RT: 19.31

Response: 101183

Amount: 2

Conc: 2



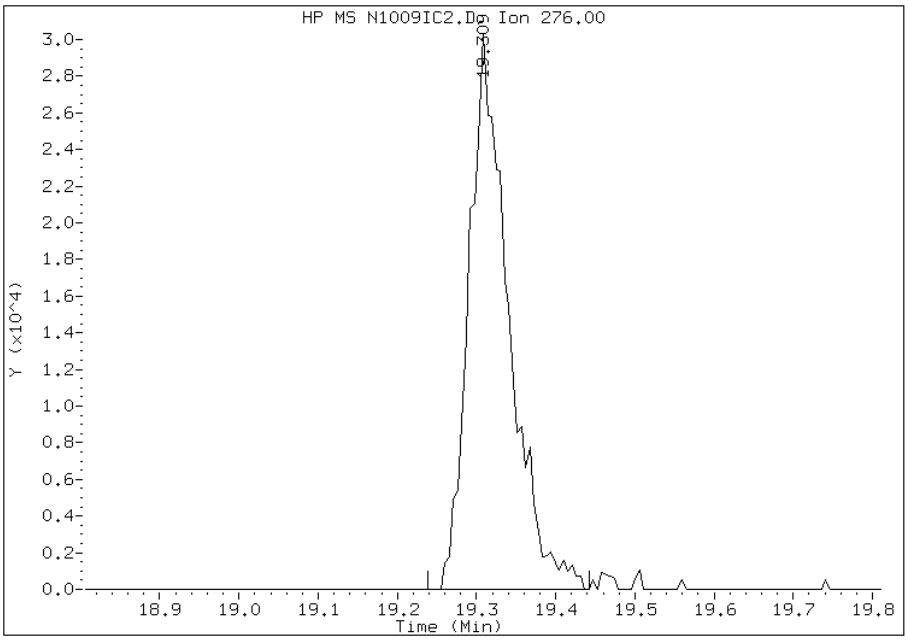
Manual Integration Results

RT: 19.31

Response: 104927

Amount: 2

Conc: 2



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:19
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC2.D
Inj. Date and Time: 09-OCT-2013 05:49
Instrument ID: 733.i
Client ID:
Compound: 150 Dibenz(a,h)anthracene
CAS #: 53-70-3
Report Date: 10/09/2013

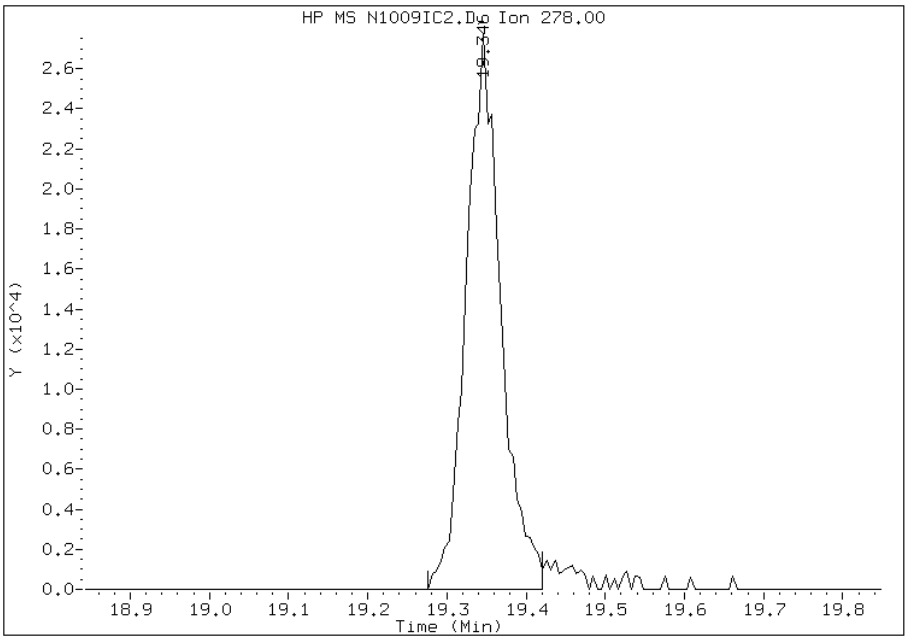
Processing Integration Results

RT: 19.35

Response: 84160

Amount: 2

Conc: 2



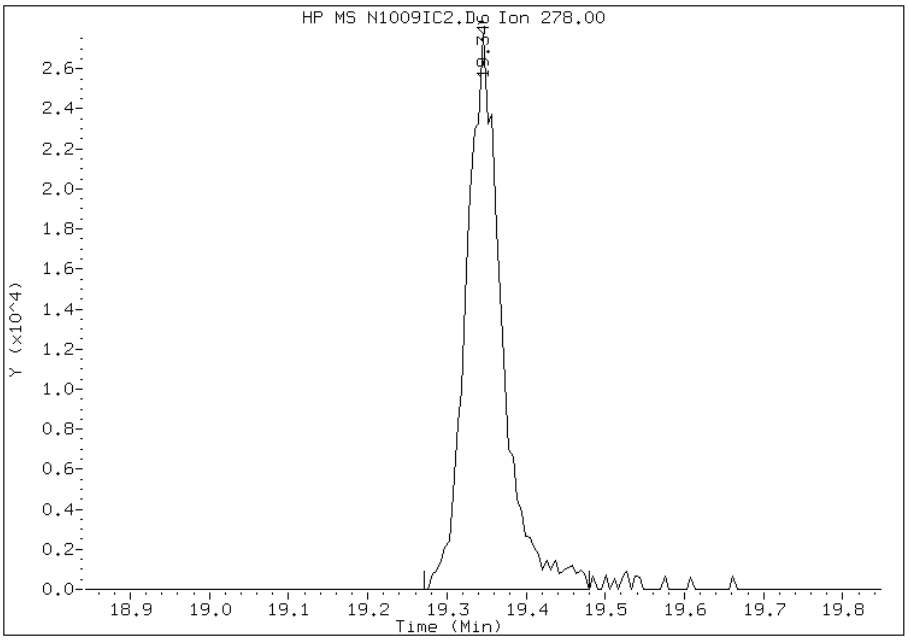
Manual Integration Results

RT: 19.35

Response: 87476

Amount: 2

Conc: 2



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:19
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC2.D
Inj. Date and Time: 09-OCT-2013 05:49
Instrument ID: 733.i
Client ID:
Compound: 151 Benzo(g,h,i)perylene
CAS #: 191-24-2
Report Date: 10/09/2013

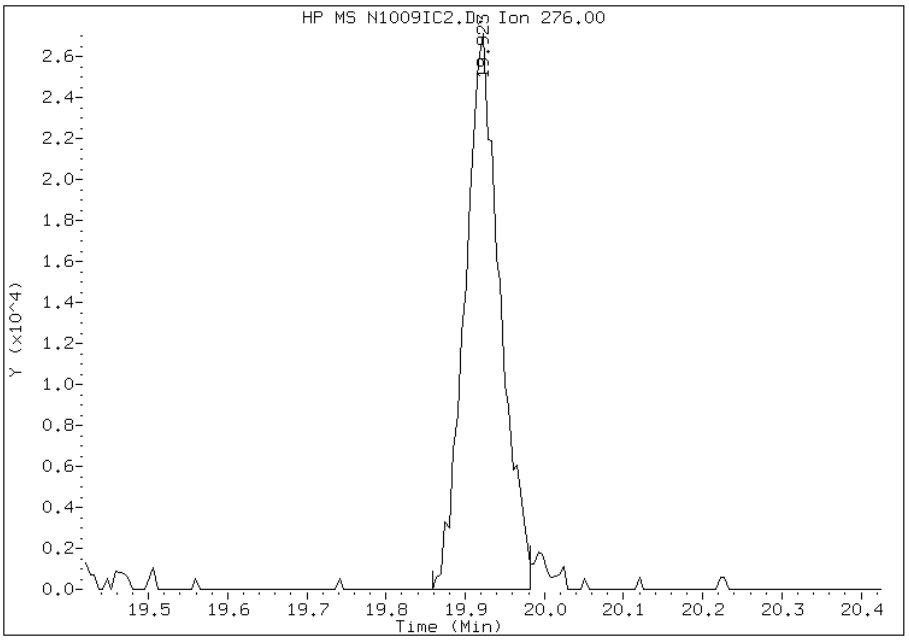
Processing Integration Results

RT: 19.92

Response: 83215

Amount: 2

Conc: 2



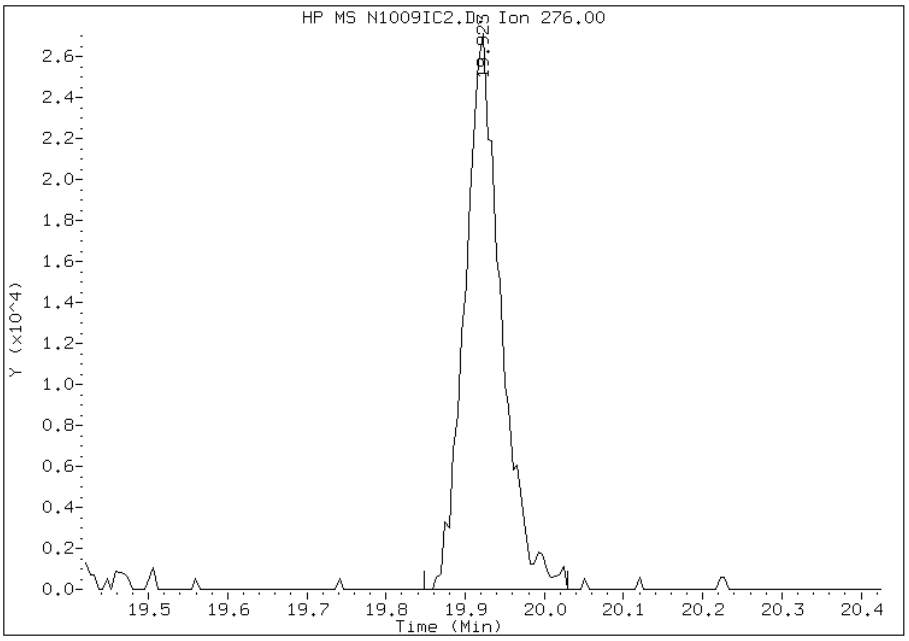
Manual Integration Results

RT: 19.92

Response: 86030

Amount: 2

Conc: 2



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:19
Manual Integration Reason: Poor Chromatography

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN100913D.b\N1009IC3.D
Lab Smp Id: IC 839800
Inj Date : 09-OCT-2013 06:15
Operator : 3200 Inst ID: 733.i
Smp Info : IC 839800
Misc Info : TN100913D.b,T8270d.m,tapitt.sub
Comment :
Method : \\PITSVR06\D\chem\733.i\TN100913D.b\T8270d.m
Meth Date : 08-Oct-2013 08:32 piccolinov Quant Type: ISTD
Cal Date : 09-OCT-2013 06:15 Cal File: N1009IC3.D
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: tapitt.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 1	1,4-Dichlorobenzene-d4	152	6.242	6.242	(1.000)	153517	8.00000	
* 2	Naphthalene-d8	136	7.470	7.470	(1.000)	538151	8.00000	
* 3	Acenaphthene-d10	164	9.127	9.127	(1.000)	301400	8.00000	
* 4	Phenanthrene-d10	188	10.521	10.521	(1.000)	510063	8.00000	
* 5	Chrysene-d12	240	14.105	14.105	(1.000)	501554	8.00000	
* 6	Perylene-d12	264	17.060	17.060	(1.000)	372303	8.00000	
198	1,4-Dioxane	88	1.701	1.701	(0.273)	41020	4.00000	3.9546
10	N-Nitrosodimethylamine	74	2.326	2.326	(0.373)	48673	4.00000	4.1724
9	Pyridine	79	2.411	2.411	(0.386)	94711	4.00000	4.8411(M)
16	Methyl methanesulfonate	80	4.618	4.618	(0.740)	61480	4.00000	4.0814
206	Benzaldehyde	77	5.788	5.788	(0.927)	78464	4.00000	3.9813
21	Aniline	93	5.905	5.905	(0.946)	135729	4.00000	4.0210
22	Phenol	94	5.895	5.895	(0.944)	120062	4.00000	3.6892
23	bis(2-Chloroethyl)ether	93	5.975	5.975	(0.957)	83276	4.00000	4.0768
24	2-Chlorophenol	128	6.033	6.033	(0.967)	97695	4.00000	3.8716
226	n-Decane	43	6.098	6.098	(0.977)	79403	4.00000	4.1576
26	1,3-Dichlorobenzene	146	6.188	6.188	(0.991)	121305	4.00000	4.1193
27	1,4-Dichlorobenzene	146	6.258	6.258	(1.003)	123486	4.00000	3.9303
28	1,2-Dichlorobenzene	146	6.413	6.413	(1.027)	115008	4.00000	3.9215
217	Indene	116	6.498	6.498	(1.041)	165760	4.00000	4.0415
29	Benzyl Alcohol	108	6.370	6.370	(1.021)	53119	4.00000	3.9590
30	2-Methylphenol	108	6.482	6.482	(1.039)	79931	4.00000	3.8058
31	2,2'-oxybis(1-Chloropropane)	45	6.509	6.509	(1.043)	88265	4.00000	3.9036
37	Acetophenone	105	6.626	6.626	(1.062)	131584	4.00000	3.5176
32	N-Nitroso-di-n-propylamine	70	6.626	6.626	(1.062)	63133	4.00000	4.1428
192	4-Methylphenol	108	6.632	6.632	(1.062)	85113	4.00000	4.0119
34	Hexachloroethane	117	6.744	6.744	(1.080)	45655	4.00000	3.9047
77	1,3-Dinitrobenzene	168	8.870	8.870	(0.972)	28524	4.00000	4.3667
35	Nitrobenzene	77	6.792	6.792	(0.909)	94553	4.00000	3.8964

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
36	N-Nitrosopyrrolidine	100	6.594	6.594	(1.056)	35574	4.00000	3.9194
41	Isophorone	82	7.022	7.022	(0.940)	152976	4.00000	4.1128
42	2-Nitrophenol	139	7.102	7.102	(0.951)	48260	4.00000	3.9928
43	2,4-Dimethylphenol	107	7.134	7.134	(0.955)	73718	4.00000	3.6872
44	bis(2-Chloroethoxy)methane	93	7.219	7.219	(0.966)	93690	4.00000	4.0027
48	2,4-Dichlorophenol	162	7.332	7.332	(0.981)	85231	4.00000	4.0348
49	Benzoic Acid	122	7.187	7.187	(0.962)	47985	8.00000	12.208(M)
50	1,2,4-Trichlorobenzene	180	7.412	7.412	(0.992)	110122	4.00000	4.1634
51	Naphthalene	128	7.492	7.492	(1.003)	270891	4.00000	3.8521
52	4-Chloroaniline	127	7.529	7.529	(1.008)	114352	4.00000	4.1317
54	2,6-Dichlorophenol	162	7.545	7.545	(1.010)	81469	4.00000	4.0159
56	Hexachlorobutadiene	225	7.609	7.609	(1.019)	69499	4.00000	3.8754
208	Caprolactam	113	7.823	7.823	(1.047)	16953	4.00000	4.0831
59	4-Chloro-3-Methylphenol	107	7.973	7.973	(1.067)	75786	4.00000	4.0318
62	2-Methylnaphthalene	142	8.144	8.144	(1.090)	190626	4.00000	3.9625
63	1-Methylnaphthalene	142	8.234	8.234	(1.102)	174686	4.00000	3.9124
64	Hexachlorocyclopentadiene	237	8.298	8.298	(0.909)	71918	4.00000	4.2527
65	1,2,4,5-Tetrachlorobenzene	216	8.304	8.304	(0.910)	111384	4.00000	3.8888
66	2,4,6-Trichlorophenol	196	8.400	8.400	(0.920)	59408	4.00000	3.9237
67	2,4,5-Trichlorophenol	196	8.432	8.432	(0.924)	65077	4.00000	4.0810
209	1,1'-Biphenyl	154	8.571	8.571	(0.939)	227230	4.00000	3.8792
70	2-Chloronaphthalene	162	8.603	8.603	(0.943)	190229	4.00000	3.7542
73	2-Nitroaniline	65	8.678	8.678	(0.951)	44961	4.00000	4.4077
76	Dimethylphthalate	163	8.833	8.833	(0.968)	192714	4.00000	3.9843
78	2,6-Dinitrotoluene	165	8.897	8.897	(0.975)	42672	4.00000	4.3020
79	Acenaphthylene	152	8.993	8.993	(0.985)	274054	4.00000	4.1171
81	3-Nitroaniline	138	9.062	9.062	(0.993)	42763	4.00000	4.1562
82	Acenaphthene	153	9.159	9.159	(1.004)	174645	4.00000	3.8968
83	2,4-Dinitrophenol	184	9.159	9.159	(1.004)	30547	8.00000	12.597(M)
85	4-Nitrophenol	109	9.196	9.196	(1.008)	46872	8.00000	9.1996
86	Dibenzofuran	168	9.313	9.313	(1.020)	252976	4.00000	4.0022
87	2,4-Dinitrotoluene	165	9.276	9.276	(1.016)	57009	4.00000	4.6421
91	2,3,5,6-Tetrachlorophenol	232	9.388	9.388	(1.029)	49885	4.00000	4.6773
88	2,3,4,6-Tetrachlorophenol	232	9.426	9.426	(1.033)	56953	4.00000	4.1779
92	2-Naphthylamine	143	9.452	9.452	(1.036)	149692	4.00000	4.1495(M)
93	Diethylphthalate	149	9.484	9.484	(1.039)	183685	4.00000	4.0879
230	n-Hexadecane	57	9.495	9.495	(1.271)	83858	4.00000	4.0853
94	Fluorene	166	9.639	9.639	(1.056)	198299	4.00000	3.9817
95	4-Chlorophenyl-phenylether	204	9.618	9.618	(1.054)	112262	4.00000	4.0290
96	4-Nitroaniline	138	9.629	9.629	(1.055)	40573	4.00000	4.1876
98	4,6-Dinitro-2-methylphenol	198	9.661	9.661	(0.918)	58444	8.00000	10.706(M)
99	N-Nitrosodiphenylamine (1)	169	9.725	9.725	(0.924)	129680	4.00000	3.9717
100	1,2-Diphenylhydrazine	77	9.768	9.768	(0.928)	175920	4.00000	4.1852
106	4-Bromophenyl-phenylether	248	10.077	10.077	(0.958)	63921	4.00000	3.8746
107	Hexachlorobenzene	284	10.163	10.163	(0.966)	59462	4.00000	3.8603
210	Atrazine	200	10.195	10.195	(0.969)	58457	4.00000	4.2322
227	n-Octadecane	57	10.345	10.345	(1.657)	83754	4.00000	3.9829
111	Pentachlorophenol	266	10.339	10.339	(0.983)	50750	8.00000	7.7172
115	Phenanthrene	178	10.542	10.542	(1.002)	274997	4.00000	3.9616
116	Anthracene	178	10.596	10.596	(1.007)	267990	4.00000	3.8993
119	Carbazole	167	10.740	10.740	(1.021)	234740	4.00000	3.8948
120	Di-n-Butylphthalate	149	11.044	11.044	(1.050)	270530	4.00000	4.2094
123	Fluoranthene	202	11.862	11.862	(1.127)	310858	4.00000	4.0304
124	Benzidine	184	11.990	11.990	(0.850)	102802	4.00000	5.1785(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
125 Pyrene	202	12.166	12.166	(0.863)	318565	4.00000	3.9963
131 Butylbenzylphthalate	149	13.037	13.037	(0.924)	97819	4.00000	4.0144
135 3,3'-Dichlorobenzidine	252	14.009	14.009	(0.993)	85151	4.00000	4.0897(M)
136 Benzo(a)Anthracene	228	14.084	14.084	(0.998)	278251	4.00000	3.8081
137 Chrysene	228	14.148	14.148	(1.003)	258466	4.00000	3.9851(M)
139 bis(2-ethylhexyl)Phthalate	149	14.057	14.057	(0.997)	127301	4.00000	4.4292
140 Di-n-octylphthalate	149	15.377	15.377	(0.901)	183681	4.00000	4.3816(M)
141 Benzo(b)fluoranthene	252	16.248	16.248	(0.952)	242975	4.00000	3.9985
142 Benzo(k)fluoranthene	252	16.306	16.306	(0.956)	264691	4.00000	3.9966
143 7,12-dimethylbenz[a]anthracen	256	16.237	16.237	(0.952)	99770	4.00000	4.2316
146 Benzo(a)pyrene	252	16.937	16.937	(0.993)	216345	4.00000	4.0009(M)
149 Indeno(1,2,3-cd)pyrene	276	19.293	19.293	(1.131)	216474	4.00000	3.9606(M)
150 Dibenz(a,h)anthracene	278	19.335	19.335	(1.133)	180647	4.00000	3.9598(M)
151 Benzo(g,h,i)perylene	276	19.902	19.902	(1.167)	182056	4.00000	4.0368(M)
$ 154 Nitrobenzene-d5	82	6.776	6.776	(0.907)	95561	4.00000	4.0230
$ 155 2-Fluorobiphenyl	172	8.475	8.475	(0.929)	221771	4.00000	4.0364
$ 156 Terphenyl-d14	244	12.326	12.326	(0.874)	234227	4.00000	3.9099
$ 157 Phenol-d5	99	5.879	5.879	(0.942)	111207	4.00000	4.0634
$ 158 2-Fluorophenol	112	4.858	4.858	(0.778)	96420	4.00000	4.2928
$ 159 2,4,6-Tribromophenol	330	9.864	9.864	(0.938)	21116	4.00000	4.3408

QC Flag Legend

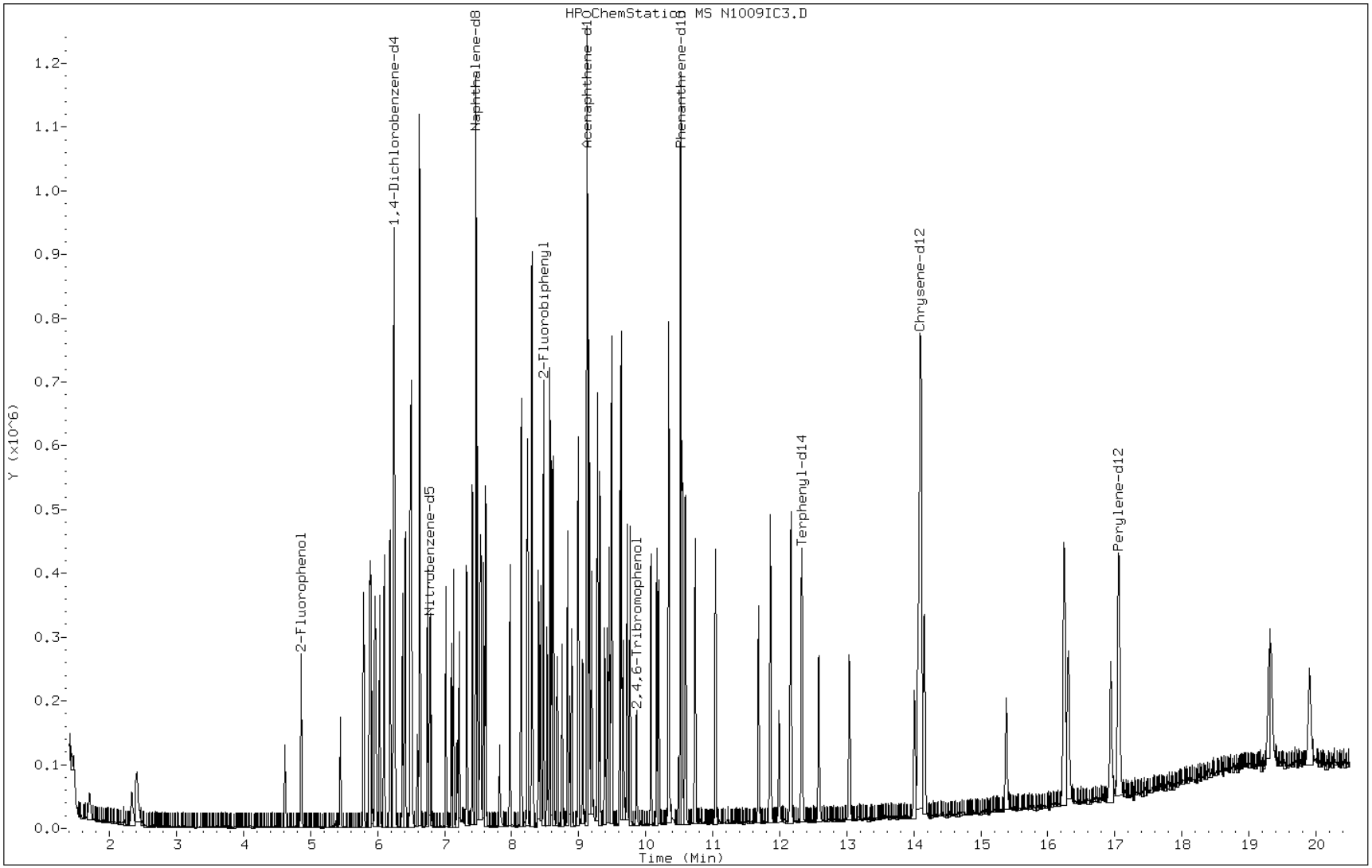
M - Compound response manually integrated.

Data File: N1009IC3.D

Date: 09-OCT-2013 06:15

Client ID: Instrument: 733.i

Sample Info: IC 839800 Operator: 3200



Manual Integration Report

Data File: N1009IC3.D
Inj. Date and Time: 09-OCT-2013 06:15
Instrument ID: 733.i
Client ID:
Compound: 9 Pyridine
CAS #: 110-86-1
Report Date: 10/09/2013

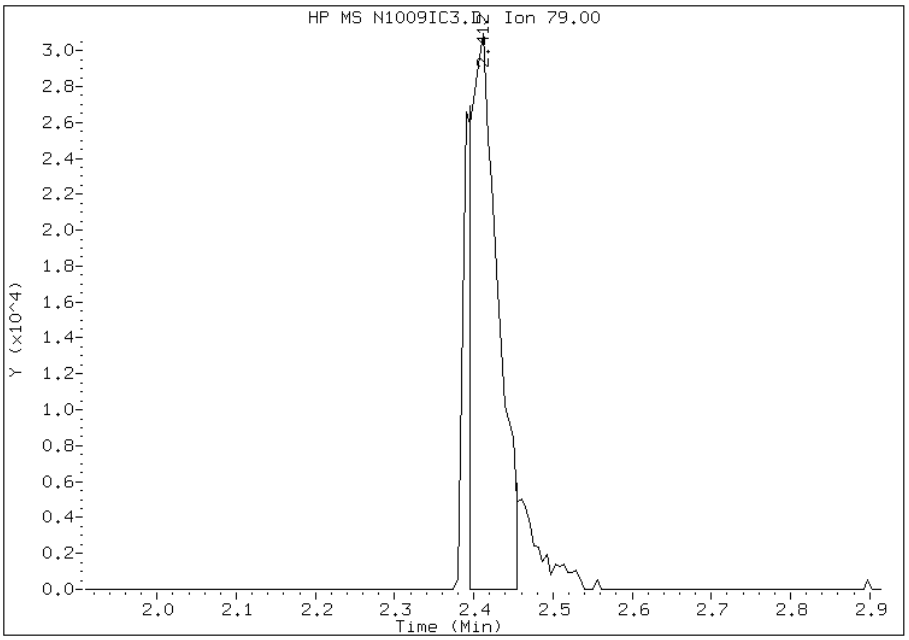
Processing Integration Results

RT: 2.41

Response: 72730

Amount: 5

Conc: 5



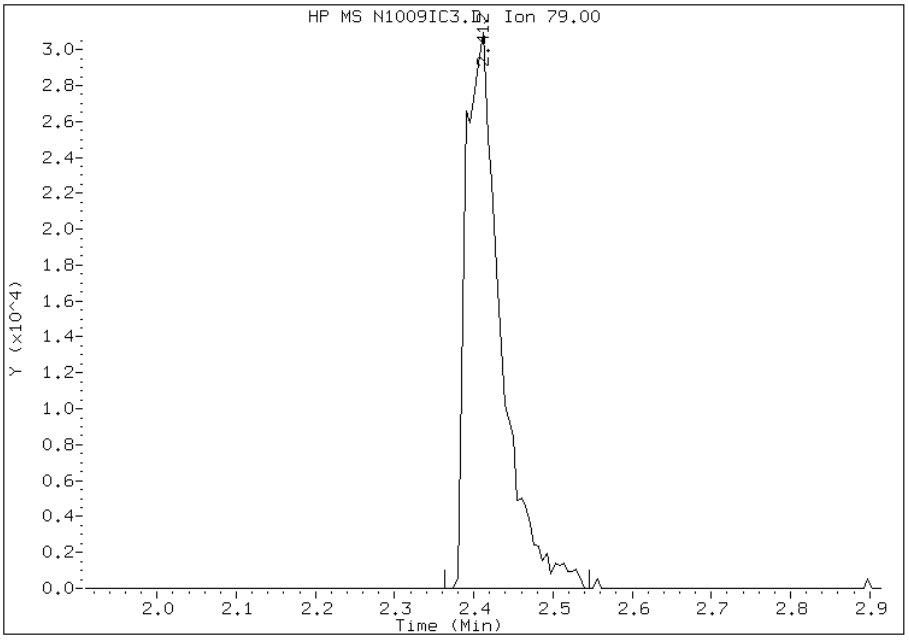
Manual Integration Results

RT: 2.41

Response: 94711

Amount: 5

Conc: 5



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:19
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC3.D
Inj. Date and Time: 09-OCT-2013 06:15
Instrument ID: 733.i
Client ID:
Compound: 49 Benzoic Acid
CAS #: 65-85-0
Report Date: 10/09/2013

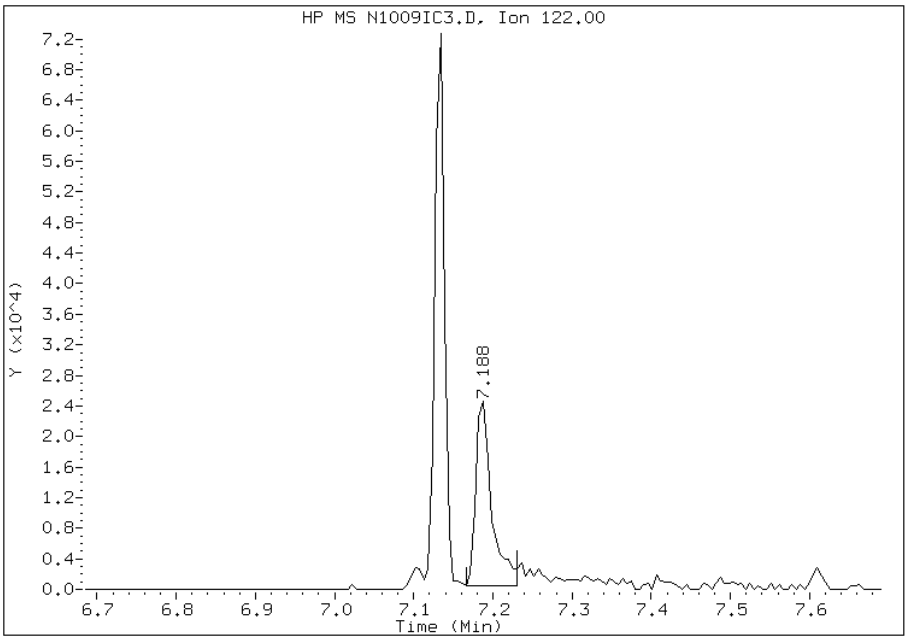
Processing Integration Results

RT: 7.19

Response: 33349

Amount: 6

Conc: 6



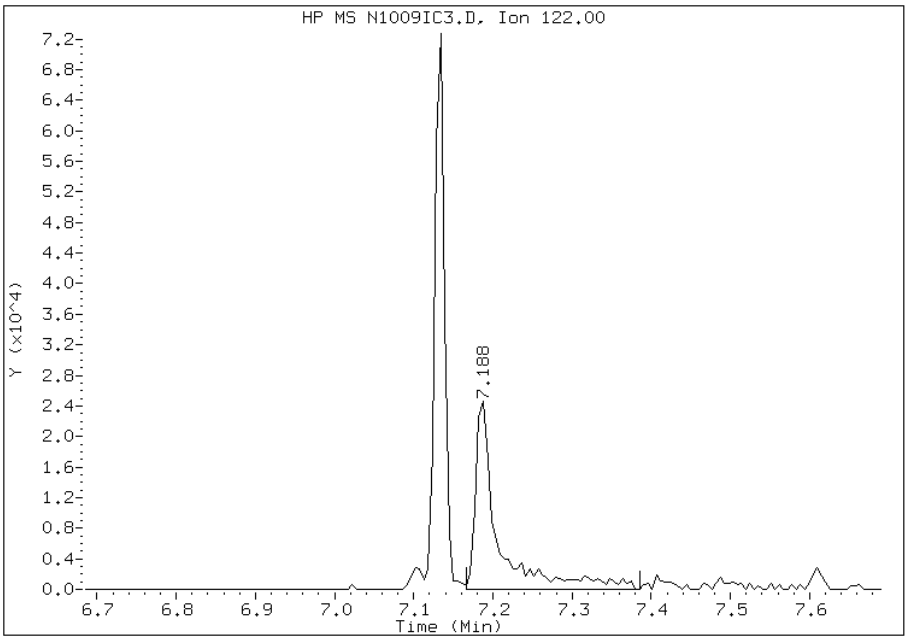
Manual Integration Results

RT: 7.19

Response: 47985

Amount: 12

Conc: 12



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:20
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC3.D
Inj. Date and Time: 09-OCT-2013 06:15
Instrument ID: 733.i
Client ID:
Compound: 83 2,4-Dinitrophenol
CAS #: 51-28-5
Report Date: 10/09/2013

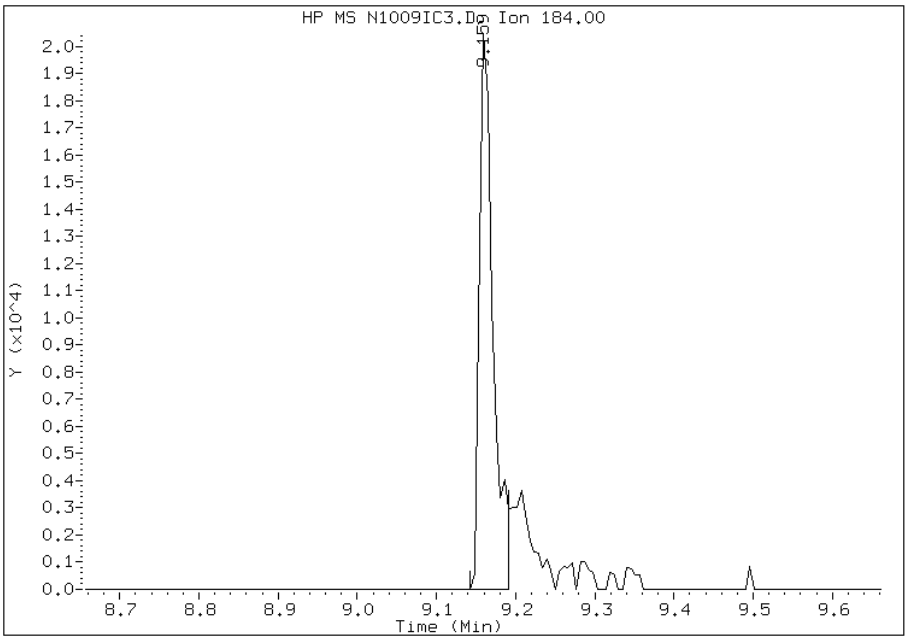
Processing Integration Results

RT: 9.16

Response: 24271

Amount: 6

Conc: 6



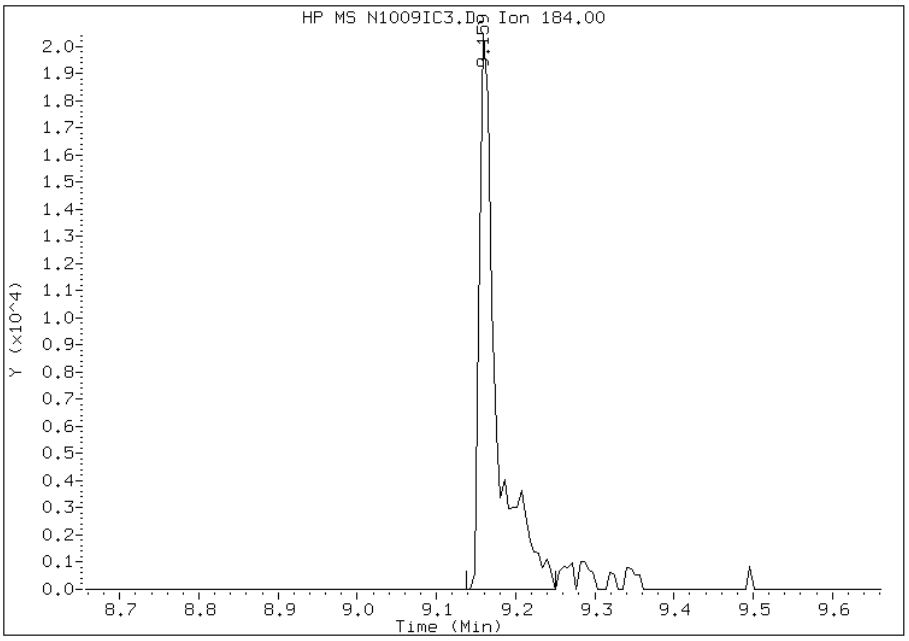
Manual Integration Results

RT: 9.16

Response: 30547

Amount: 13

Conc: 13



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:20
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC3.D
Inj. Date and Time: 09-OCT-2013 06:15
Instrument ID: 733.i
Client ID:
Compound: 92 2-Naphthylamine
CAS #: 91-59-8
Report Date: 10/09/2013

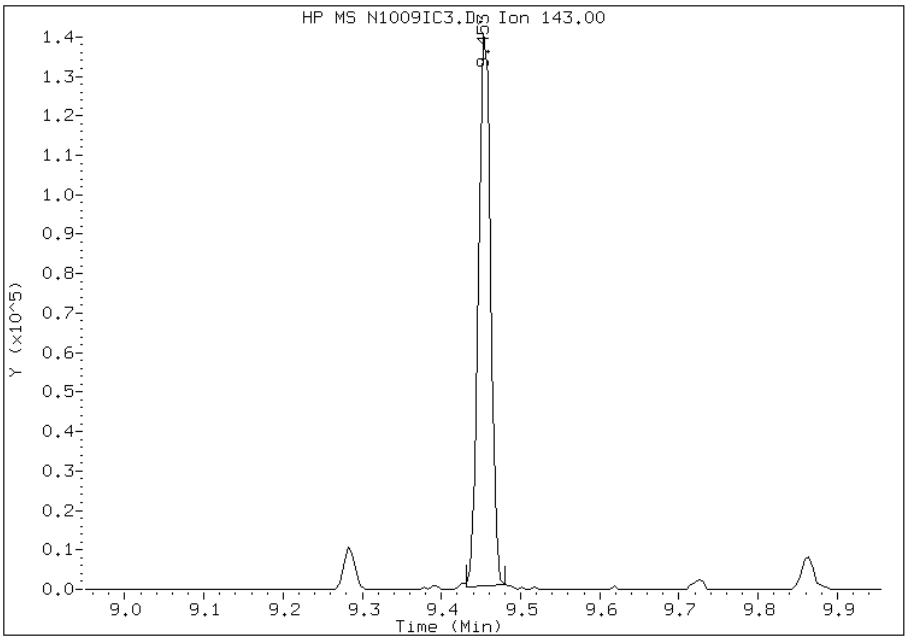
Processing Integration Results

RT: 9.45

Response: 145419

Amount: 4

Conc: 4



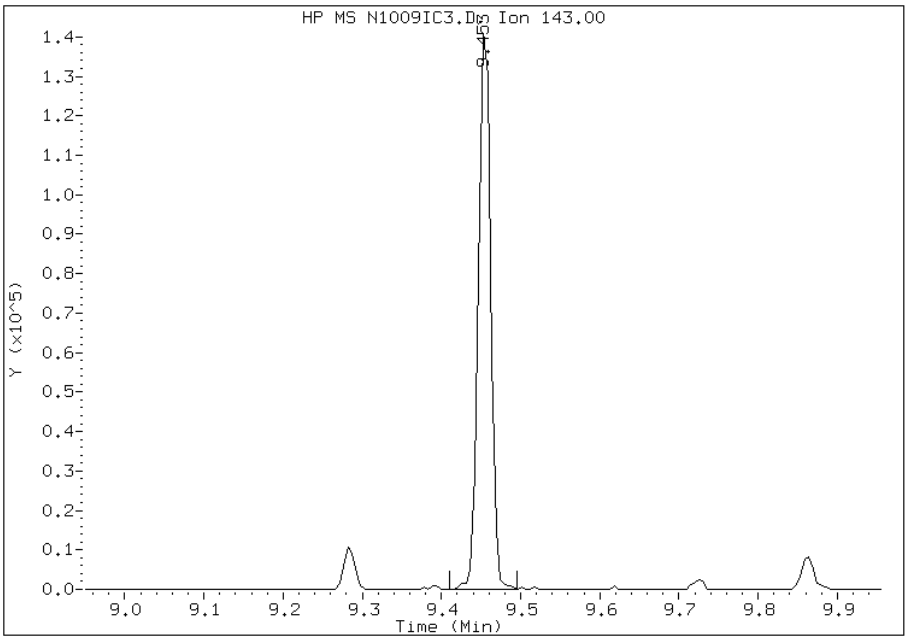
Manual Integration Results

RT: 9.45

Response: 149692

Amount: 4

Conc: 4



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:20
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC3.D
Inj. Date and Time: 09-OCT-2013 06:15
Instrument ID: 733.i
Client ID:
Compound: 98 4,6-Dinitro-2-methylphenol
CAS #: 534-52-1
Report Date: 10/09/2013

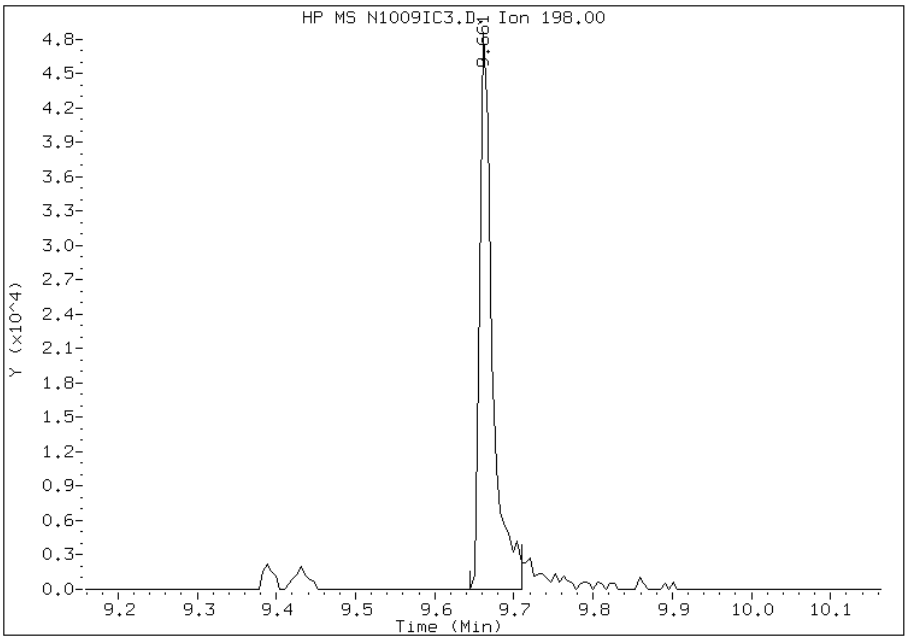
Processing Integration Results

RT: 9.66

Response: 53684

Amount: 8

Conc: 8



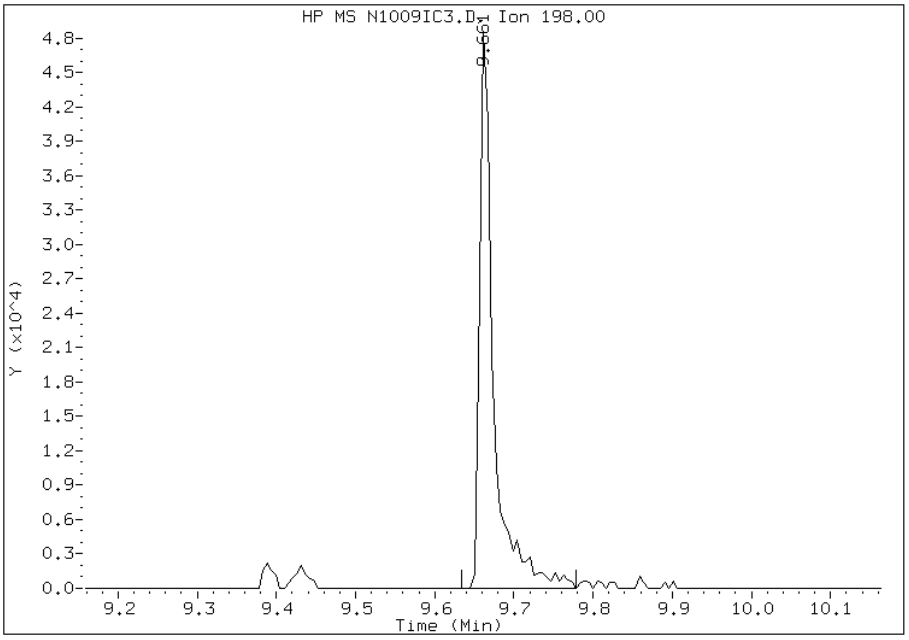
Manual Integration Results

RT: 9.66

Response: 58444

Amount: 11

Conc: 11



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:20
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC3.D
Inj. Date and Time: 09-OCT-2013 06:15
Instrument ID: 733.i
Client ID:
Compound: 124 Benzidine
CAS #: 92-87-5
Report Date: 10/09/2013

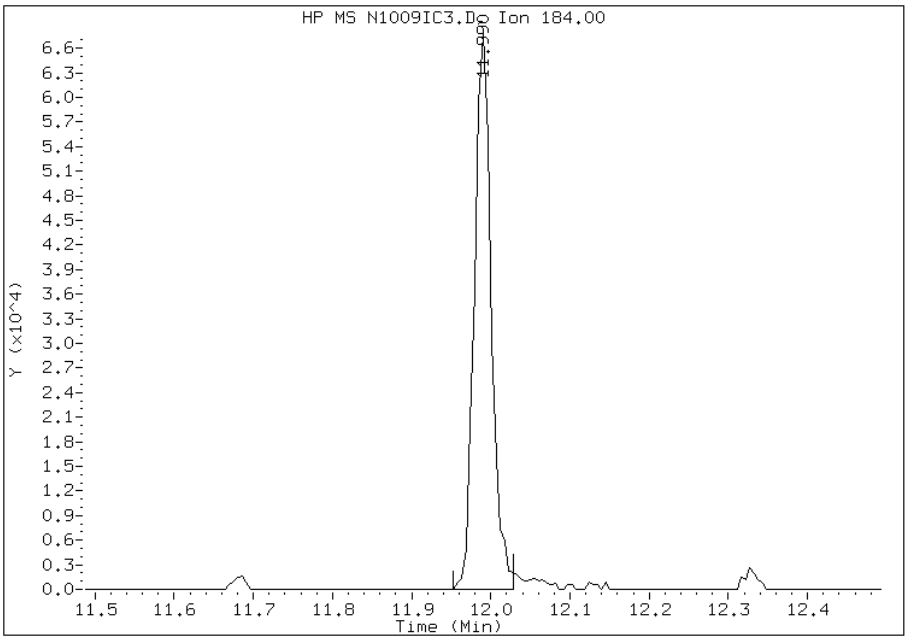
Processing Integration Results

RT: 11.99

Response: 99419

Amount: 5

Conc: 5



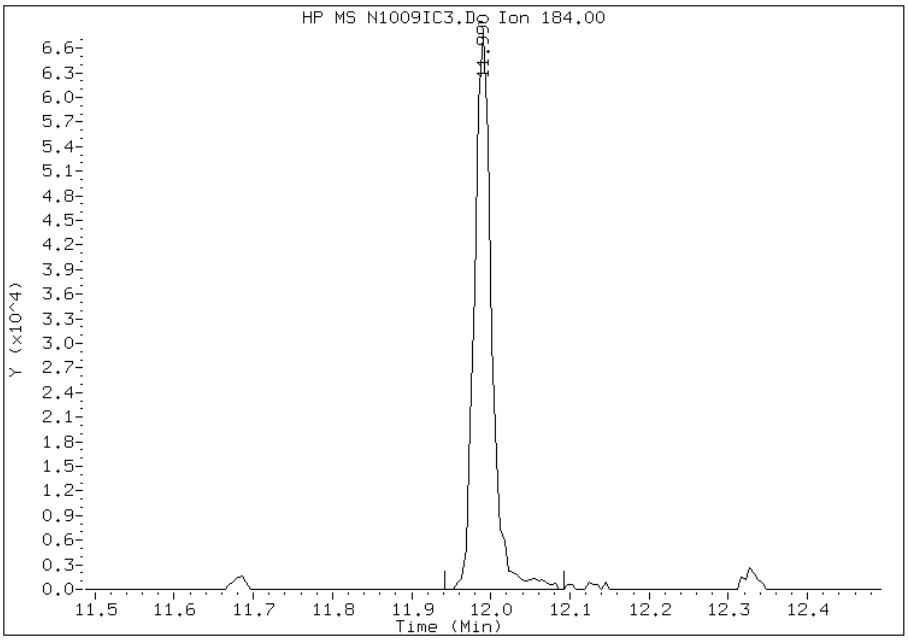
Manual Integration Results

RT: 11.99

Response: 102802

Amount: 5

Conc: 5



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:20
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC3.D
Inj. Date and Time: 09-OCT-2013 06:15
Instrument ID: 733.i
Client ID:
Compound: 135 3,3'-Dichlorobenzidine
CAS #: 91-94-1
Report Date: 10/09/2013

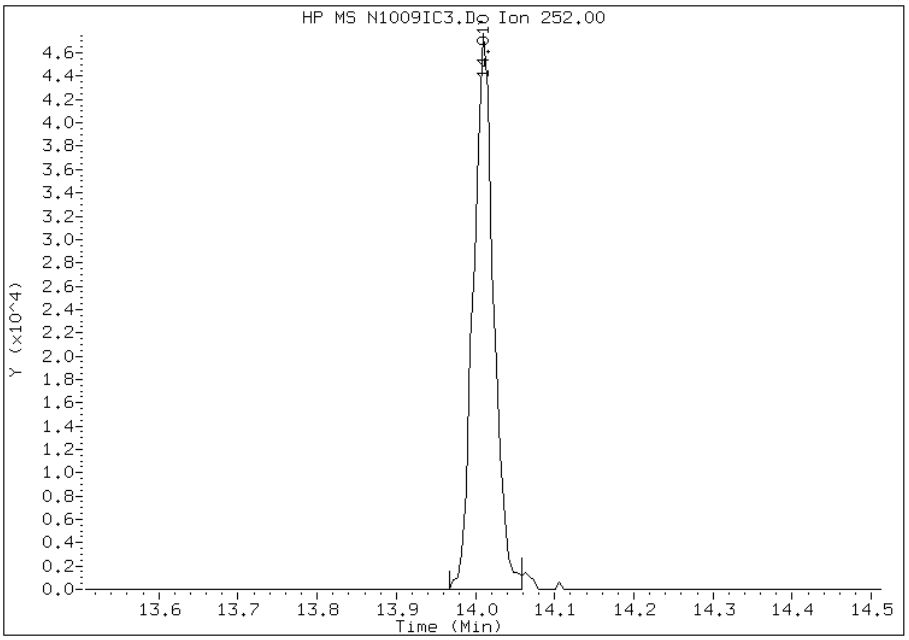
Processing Integration Results

RT: 14.01

Response: 84077

Amount: 4

Conc: 4



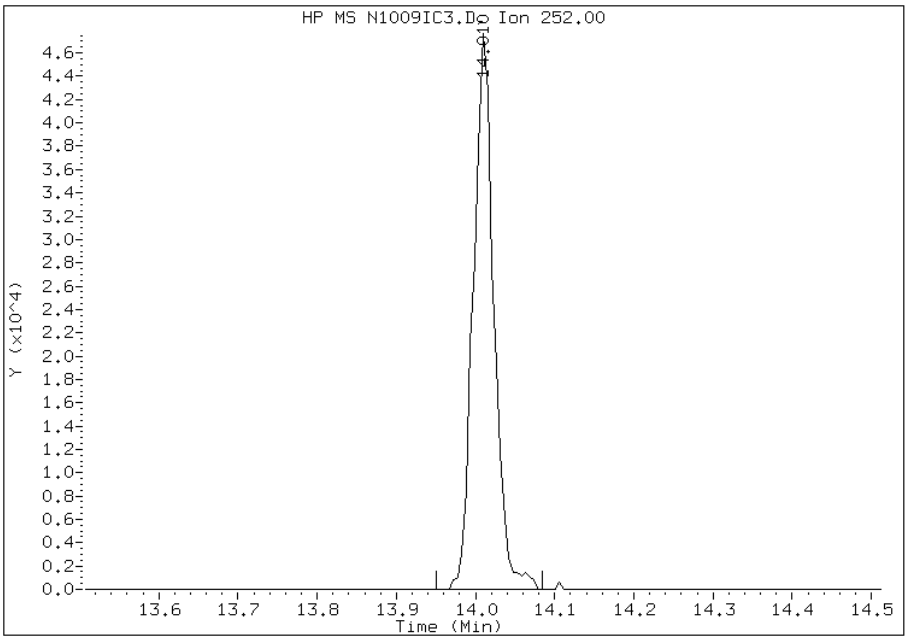
Manual Integration Results

RT: 14.01

Response: 85151

Amount: 4

Conc: 4



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:21
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC3.D
Inj. Date and Time: 09-OCT-2013 06:15
Instrument ID: 733.i
Client ID:
Compound: 137 Chrysene
CAS #: 218-01-9
Report Date: 10/09/2013

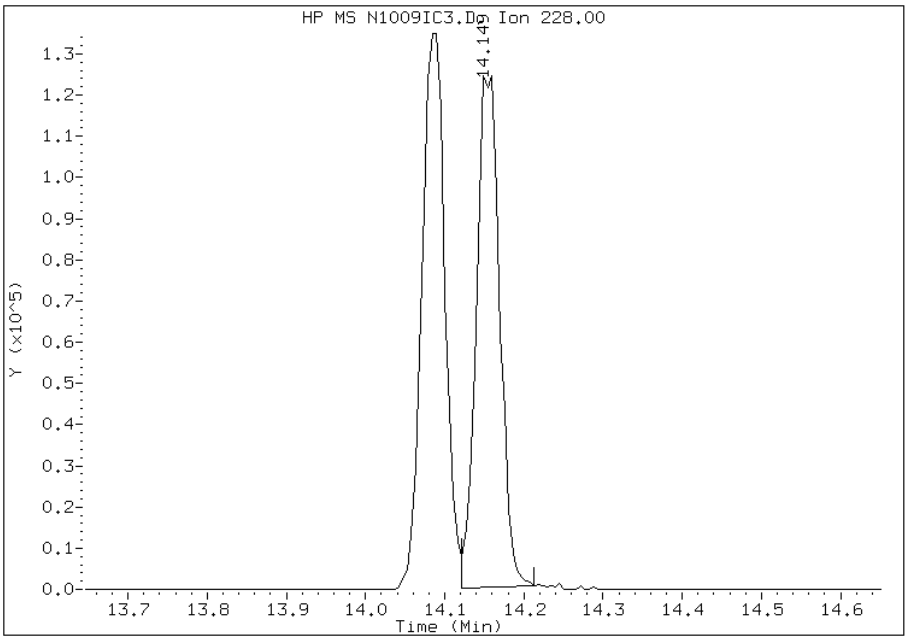
Processing Integration Results

RT: 14.15

Response: 253387

Amount: 4

Conc: 4



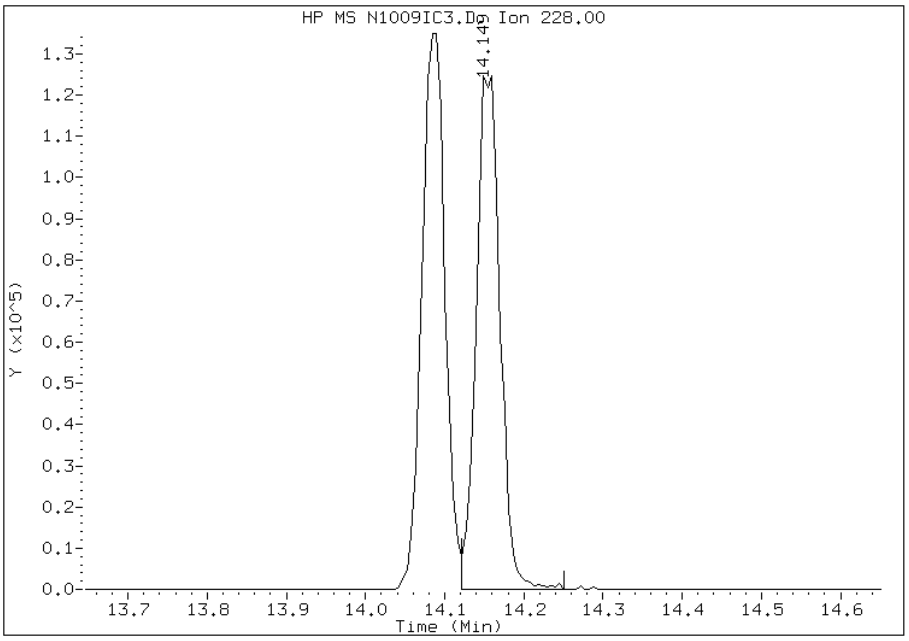
Manual Integration Results

RT: 14.15

Response: 258466

Amount: 4

Conc: 4



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:21
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC3.D
Inj. Date and Time: 09-OCT-2013 06:15
Instrument ID: 733.i
Client ID:
Compound: 140 Di-n-octylphthalate
CAS #: 117-84-0
Report Date: 10/09/2013

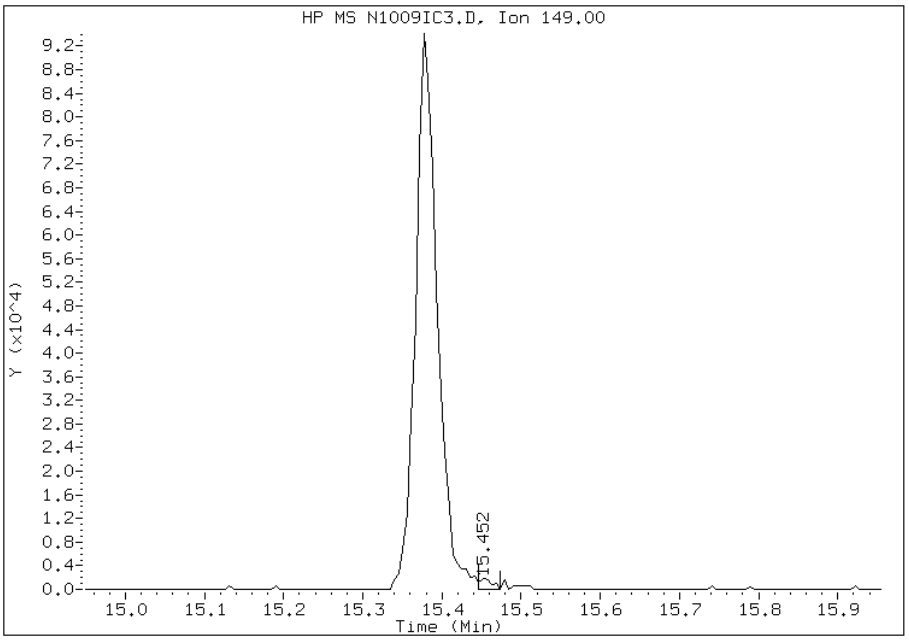
Processing Integration Results

RT: 15.45

Response: 2076

Amount: 0

Conc: 0



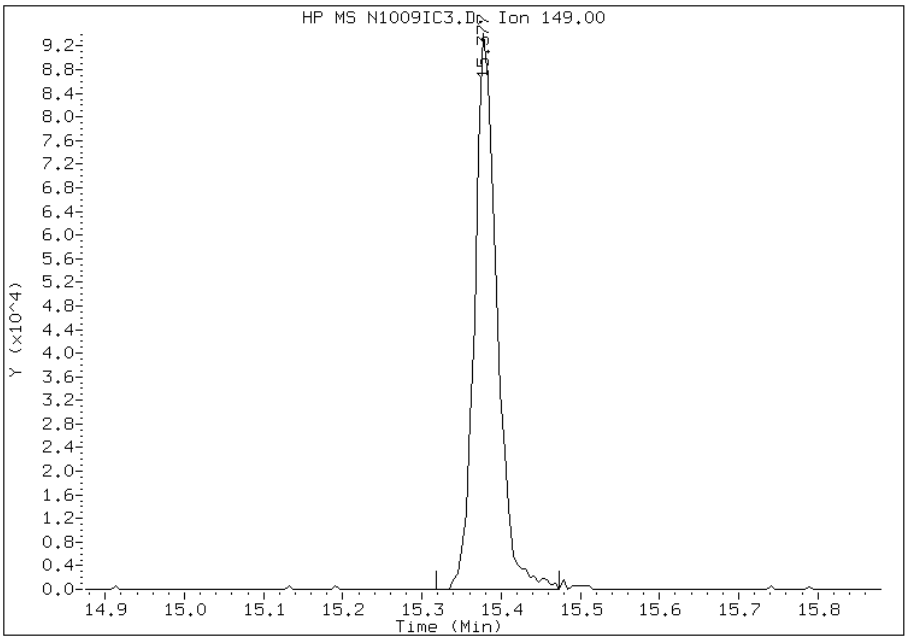
Manual Integration Results

RT: 15.38

Response: 183681

Amount: 4

Conc: 4



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:21
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N1009IC3.D
Inj. Date and Time: 09-OCT-2013 06:15
Instrument ID: 733.i
Client ID:
Compound: 146 Benzo(a)pyrene
CAS #: 50-32-8
Report Date: 10/09/2013

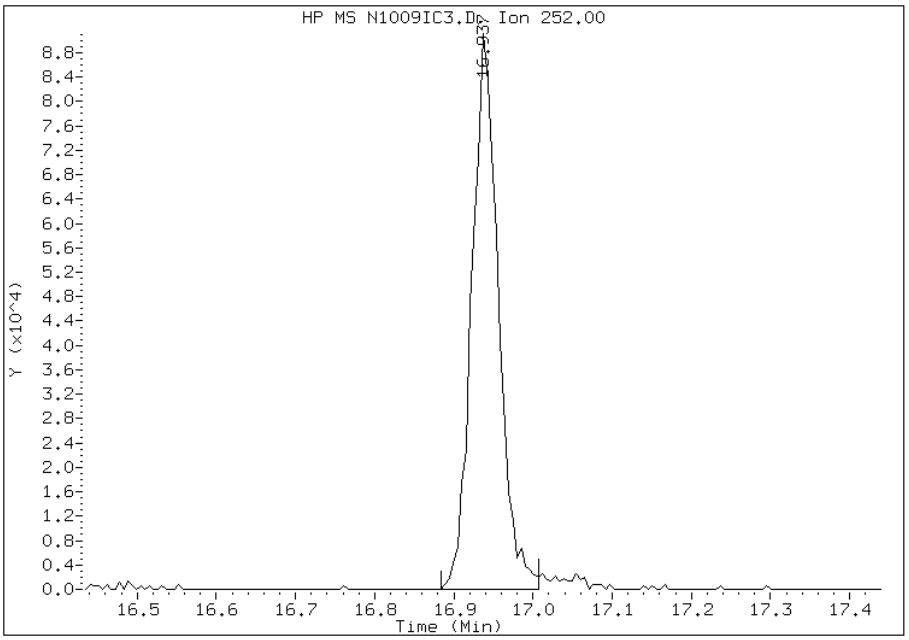
Processing Integration Results

RT: 16.94

Response: 210084

Amount: 4

Conc: 4



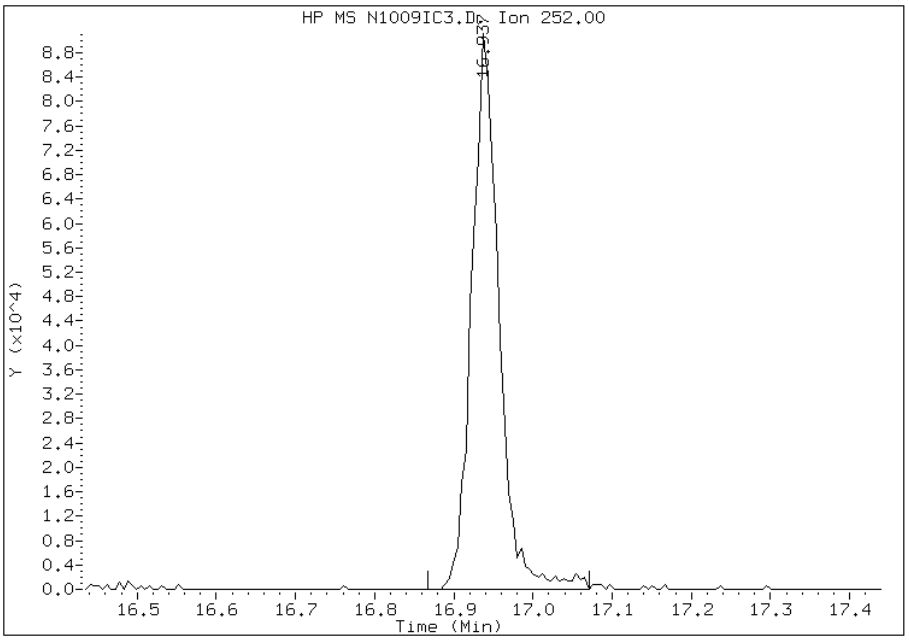
Manual Integration Results

RT: 16.94

Response: 216345

Amount: 4

Conc: 4



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:21
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC3.D
Inj. Date and Time: 09-OCT-2013 06:15
Instrument ID: 733.i
Client ID:
Compound: 149 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 10/09/2013

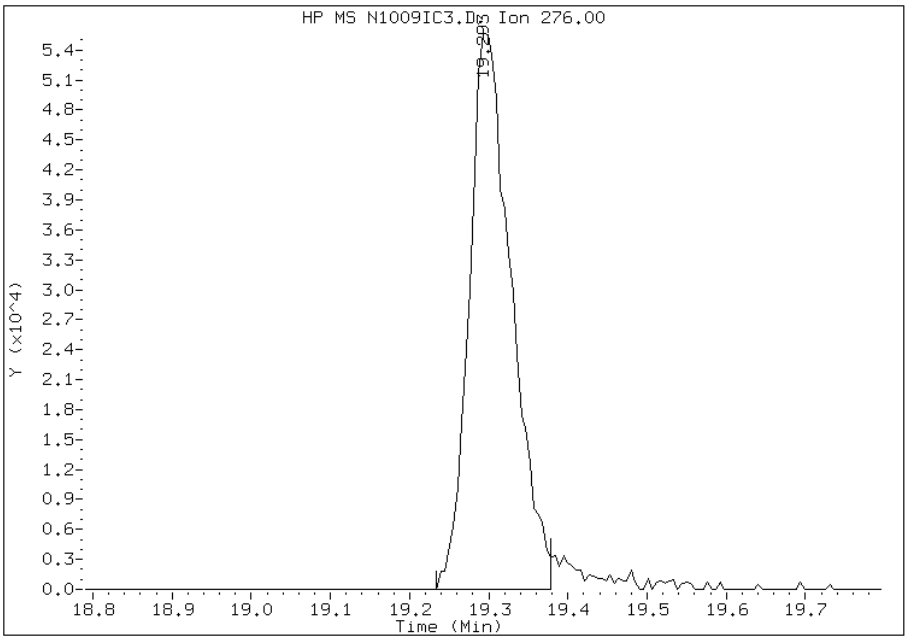
Processing Integration Results

RT: 19.29

Response: 206216

Amount: 4

Conc: 4



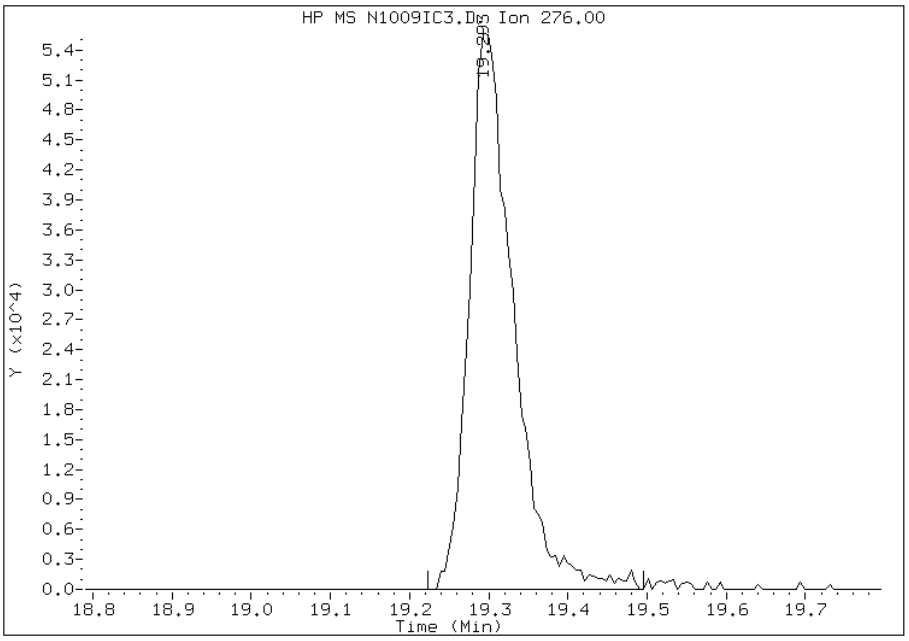
Manual Integration Results

RT: 19.29

Response: 216474

Amount: 4

Conc: 4



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:21
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC3.D
Inj. Date and Time: 09-OCT-2013 06:15
Instrument ID: 733.i
Client ID:
Compound: 150 Dibenz(a,h)anthracene
CAS #: 53-70-3
Report Date: 10/09/2013

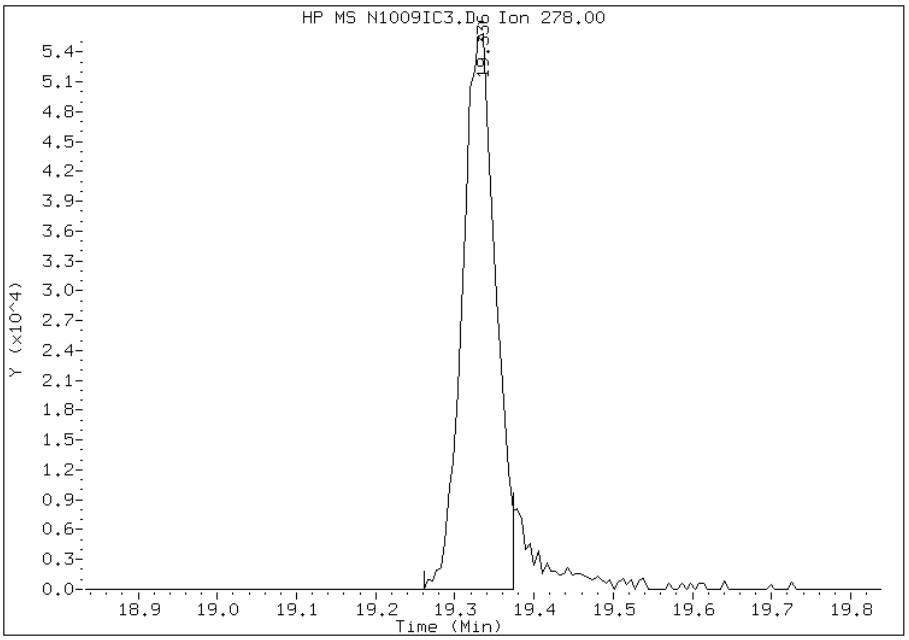
Processing Integration Results

RT: 19.34

Response: 163012

Amount: 4

Conc: 4



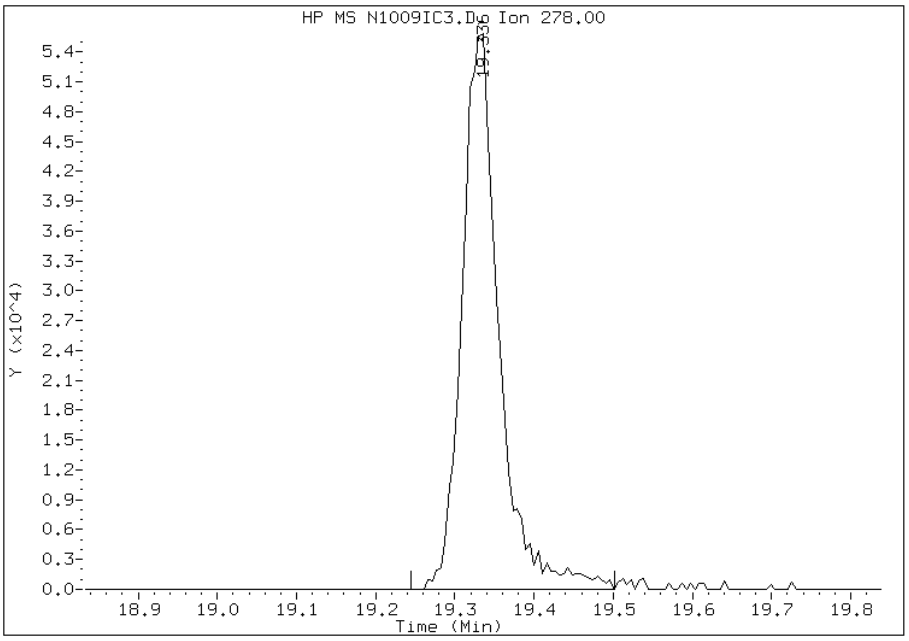
Manual Integration Results

RT: 19.34

Response: 180647

Amount: 4

Conc: 4



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:21
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC3.D
Inj. Date and Time: 09-OCT-2013 06:15
Instrument ID: 733.i
Client ID:
Compound: 151 Benzo(g,h,i)perylene
CAS #: 191-24-2
Report Date: 10/09/2013

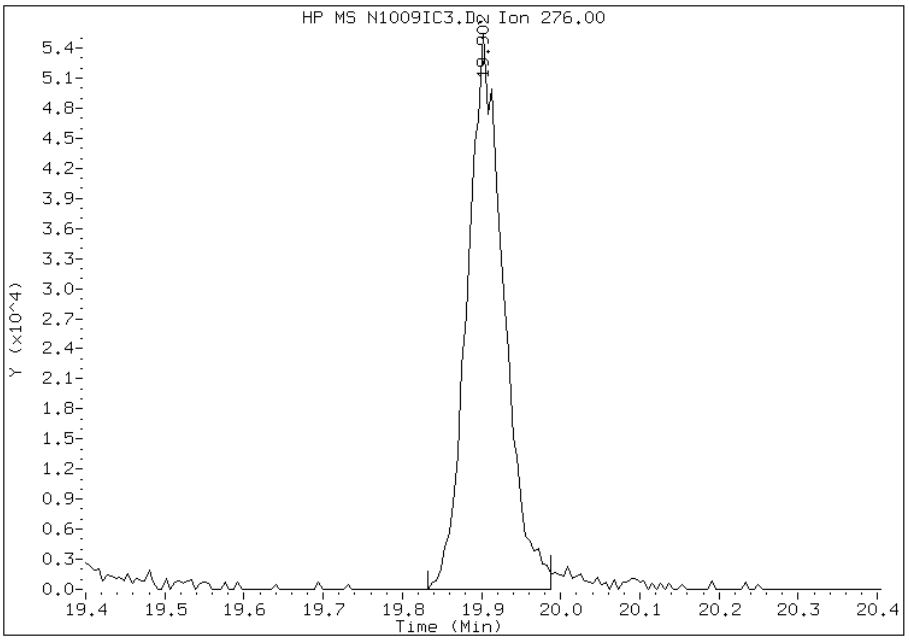
Processing Integration Results

RT: 19.90

Response: 177144

Amount: 4

Conc: 4



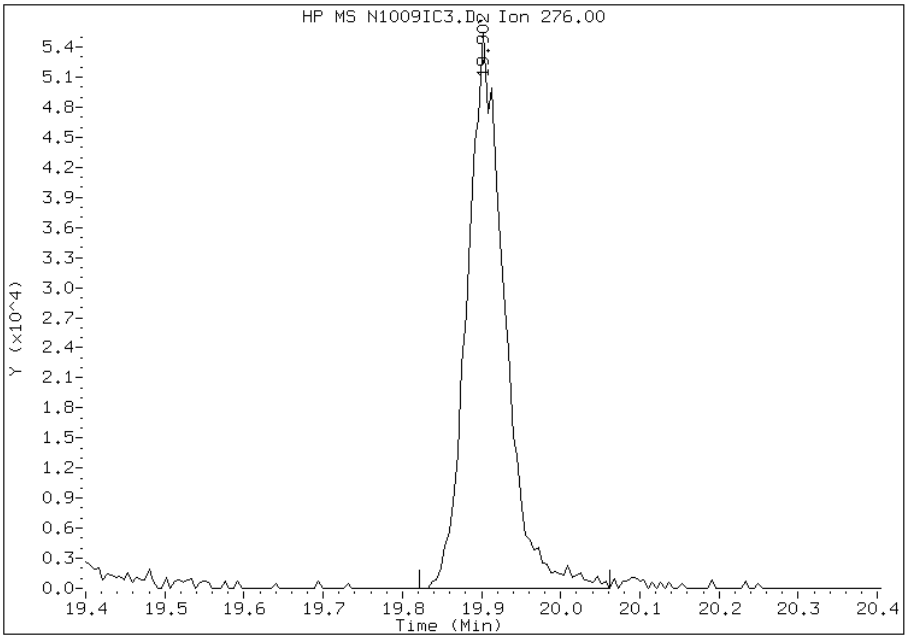
Manual Integration Results

RT: 19.90

Response: 182056

Amount: 4

Conc: 4



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:21
Manual Integration Reason: Poor Chromatography

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN100913D.b\N1009IC4.D
Lab Smp Id: ICIS 976330
Inj Date : 09-OCT-2013 06:40
Operator : 3200 Inst ID: 733.i
Smp Info : ICIS 976330
Misc Info : TN100913D.b,T8270d.m,tapitt.sub
Comment :
Method : \\PITSVR06\D\chem\733.i\TN100913D.b\T8270d.m
Meth Date : 08-Oct-2013 08:32 piccolinov Quant Type: ISTD
Cal Date : 09-OCT-2013 06:40 Cal File: N1009IC4.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: tapitt.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 1	1,4-Dichlorobenzene-d4	152	6.254	6.254	(1.000)	188114	8.00000	
* 2	Naphthalene-d8	136	7.477	7.477	(1.000)	668301	8.00000	
* 3	Acenaphthene-d10	164	9.139	9.139	(1.000)	372720	8.00000	
* 4	Phenanthrene-d10	188	10.533	10.533	(1.000)	628542	8.00000	
* 5	Chrysene-d12	240	14.134	14.134	(1.000)	617714	8.00000	
* 6	Perylene-d12	264	17.088	17.088	(1.000)	478556	8.00000	
198	1,4-Dioxane	88	1.724	1.724	(0.276)	117386	10.0000	9.4154(M)
10	N-Nitrosodimethylamine	74	2.349	2.349	(0.376)	155922	10.0000	10.666(M)
9	Pyridine	79	2.413	2.413	(0.386)	289975	10.0000	11.494(M)
16	Methyl methanesulfonate	80	4.630	4.630	(0.740)	181659	10.0000	9.8807
206	Benzaldehyde	77	5.800	5.800	(0.927)	236769	10.0000	9.8525
21	Aniline	93	5.918	5.918	(0.946)	425779	10.0000	10.219
22	Phenol	94	5.902	5.902	(0.944)	385287	10.0000	9.7440
23	bis(2-Chloroethyl)ether	93	5.987	5.987	(0.957)	242048	10.0000	9.7507
24	2-Chlorophenol	128	6.040	6.040	(0.966)	298233	10.0000	9.7316
226	n-Decane	43	6.105	6.105	(0.976)	228116	10.0000	9.8095
26	1,3-Dichlorobenzene	146	6.195	6.195	(0.991)	373611	10.0000	10.263
27	1,4-Dichlorobenzene	146	6.270	6.270	(1.003)	366256	10.0000	9.6304
28	1,2-Dichlorobenzene	146	6.420	6.420	(1.026)	343817	10.0000	9.6718
217	Indene	116	6.511	6.511	(1.041)	498366	10.0000	9.9370
29	Benzyl Alcohol	108	6.382	6.382	(1.020)	169334	10.0000	10.223
30	2-Methylphenol	108	6.494	6.494	(1.038)	247813	10.0000	9.7192
31	2,2'-oxybis(1-Chloropropane)	45	6.516	6.516	(1.042)	262582	10.0000	9.6026
37	Acetophenone	105	6.639	6.639	(1.061)	392914	10.0000	8.8892
32	N-Nitroso-di-n-propylamine	70	6.639	6.639	(1.061)	184502	10.0000	9.9100
192	4-Methylphenol	108	6.639	6.639	(1.061)	263234	10.0000	10.094
34	Hexachloroethane	117	6.756	6.756	(1.080)	139219	10.0000	9.7862
77	1,3-Dinitrobenzene	168	8.882	8.882	(0.972)	97300	10.0000	11.459
35	Nitrobenzene	77	6.804	6.804	(0.910)	286996	10.0000	9.6384

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
36	N-Nitrosopyrrolidine	100	6.607	6.607	(1.056)	111136	10.0000	9.9945
41	Isophorone	82	7.029	7.029	(0.940)	466282	10.0000	10.071
42	2-Nitrophenol	139	7.114	7.114	(0.951)	161525	10.0000	10.560
43	2,4-Dimethylphenol	107	7.141	7.141	(0.955)	239180	10.0000	9.7226
44	bis(2-Chloroethoxy)methane	93	7.226	7.226	(0.966)	281231	10.0000	9.7544
48	2,4-Dichlorophenol	162	7.339	7.339	(0.981)	264849	10.0000	10.072
49	Benzoic Acid	122	7.216	7.216	(0.965)	209924	20.0000	33.401(M)
50	1,2,4-Trichlorobenzene	180	7.424	7.424	(0.993)	318633	10.0000	9.7737
51	Naphthalene	128	7.499	7.499	(1.003)	827894	10.0000	9.6049
52	4-Chloroaniline	127	7.542	7.542	(1.009)	344992	10.0000	10.028
54	2,6-Dichlorophenol	162	7.552	7.552	(1.010)	253773	10.0000	10.055
56	Hexachlorobutadiene	225	7.622	7.622	(1.019)	212950	10.0000	9.6679
208	Caprolactam	113	7.841	7.841	(1.049)	61720	10.0000	11.408
59	4-Chloro-3-Methylphenol	107	7.985	7.985	(1.068)	235075	10.0000	10.053
62	2-Methylnaphthalene	142	8.151	8.151	(1.090)	599012	10.0000	10.020
63	1-Methylnaphthalene	142	8.247	8.247	(1.103)	536012	10.0000	9.7482
64	Hexachlorocyclopentadiene	237	8.311	8.311	(0.909)	232795	10.0000	10.825
65	1,2,4,5-Tetrachlorobenzene	216	8.316	8.316	(0.910)	332611	10.0000	9.5359
66	2,4,6-Trichlorophenol	196	8.412	8.412	(0.921)	189964	10.0000	10.109
67	2,4,5-Trichlorophenol	196	8.444	8.444	(0.924)	200605	10.0000	10.129
209	1,1'-Biphenyl	154	8.583	8.583	(0.939)	679494	10.0000	9.5281
70	2-Chloronaphthalene	162	8.610	8.610	(0.942)	596538	10.0000	9.6357
73	2-Nitroaniline	65	8.690	8.690	(0.951)	134743	10.0000	10.503
76	Dimethylphthalate	163	8.850	8.850	(0.968)	597058	10.0000	9.9864
78	2,6-Dinitrotoluene	165	8.909	8.909	(0.975)	139584	10.0000	11.000
79	Acenaphthylene	152	9.005	9.005	(0.985)	842830	10.0000	10.178
81	3-Nitroaniline	138	9.075	9.075	(0.993)	138464	10.0000	10.647
82	Acenaphthene	153	9.171	9.171	(1.004)	545227	10.0000	9.8777
83	2,4-Dinitrophenol	184	9.171	9.171	(1.004)	146704	20.0000	35.932
85	4-Nitrophenol	109	9.208	9.208	(1.008)	151449	20.0000	22.882
86	Dibenzofuran	168	9.331	9.331	(1.021)	750647	10.0000	9.6993
87	2,4-Dinitrotoluene	165	9.288	9.288	(1.016)	177222	10.0000	11.202
91	2,3,5,6-Tetrachlorophenol	232	9.401	9.401	(1.029)	166345	10.0000	11.839
88	2,3,4,6-Tetrachlorophenol	232	9.438	9.438	(1.033)	180055	10.0000	10.502
92	2-Naphthylamine	143	9.470	9.470	(1.036)	396689	10.0000	9.1455
93	Diethylphthalate	149	9.502	9.502	(1.040)	556417	10.0000	10.010
230	n-Hexadecane	57	9.507	9.507	(1.271)	261854	10.0000	10.203
94	Fluorene	166	9.652	9.652	(1.056)	601869	10.0000	9.8284
95	4-Chlorophenyl-phenylether	204	9.630	9.630	(1.054)	334522	10.0000	9.7796
96	4-Nitroaniline	138	9.646	9.646	(1.056)	130984	10.0000	10.683
98	4,6-Dinitro-2-methylphenol	198	9.673	9.673	(0.918)	224899	20.0000	28.627(M)
99	N-Nitrosodiphenylamine (1)	169	9.737	9.737	(0.924)	410162	10.0000	10.145
100	1,2-Diphenylhydrazine	77	9.780	9.780	(0.928)	524970	10.0000	10.101
106	4-Bromophenyl-phenylether	248	10.090	10.090	(0.958)	191179	10.0000	9.5463
107	Hexachlorobenzene	284	10.175	10.175	(0.966)	178508	10.0000	9.5464
210	Atrazine	200	10.207	10.207	(0.969)	173308	10.0000	10.136
227	n-Octadecane	57	10.357	10.357	(1.656)	277262	10.0000	10.559
111	Pentachlorophenol	266	10.346	10.346	(0.982)	224270	20.0000	25.252
115	Phenanthrene	178	10.560	10.560	(1.003)	825480	10.0000	9.7353
116	Anthracene	178	10.608	10.608	(1.007)	840711	10.0000	9.9448
119	Carbazole	167	10.752	10.752	(1.021)	738707	10.0000	9.9597
120	Di-n-Butylphthalate	149	11.057	11.057	(1.050)	858378	10.0000	10.616
123	Fluoranthene	202	11.879	11.879	(1.128)	984174	10.0000	10.264
124	Benzidine	184	12.008	12.008	(0.850)	258632	10.0000	10.428

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
125 Pyrene	202	12.184	12.184	(0.862)	966221	10.0000	9.8808
131 Butylbenzylphthalate	149	13.060	13.060	(0.924)	342918	10.0000	11.033
135 3,3'-Dichlorobenzidine	252	14.032	14.032	(0.993)	292860	10.0000	11.029
136 Benzo(a)Anthracene	228	14.112	14.112	(0.998)	857247	10.0000	9.6402
137 Chrysene	228	14.182	14.182	(1.003)	769702	10.0000	9.7244
139 bis(2-ethylhexyl)Phthalate	149	14.091	14.091	(0.997)	447394	10.0000	11.857
140 Di-n-octylphthalate	149	15.411	15.411	(0.902)	664163	10.0000	11.648
141 Benzo(b)fluoranthene	252	16.281	16.281	(0.953)	835571	10.0000	10.514
142 Benzo(k)fluoranthene	252	16.340	16.340	(0.956)	792626	10.0000	9.4740
143 7,12-dimethylbenz[a]anthracen	256	16.265	16.265	(0.952)	334991	10.0000	10.770
146 Benzo(a)pyrene	252	16.970	16.970	(0.993)	726944	10.0000	10.340(M)
149 Indeno(1,2,3-cd)pyrene	276	19.326	19.326	(1.131)	722868	10.0000	10.215(M)
150 Dibenz(a,h)anthracene	278	19.364	19.364	(1.133)	629421	10.0000	10.540(M)
151 Benzo(g,h,i)perylene	276	19.941	19.941	(1.167)	622558	10.0000	10.544(M)
$ 154 Nitrobenzene-d5	82	6.783	6.783	(0.907)	288855	10.0000	9.8434
$ 155 2-Fluorobiphenyl	172	8.487	8.487	(0.929)	675048	10.0000	9.9514
$ 156 Terphenyl-d14	244	12.349	12.349	(0.874)	707458	10.0000	9.6883
$ 157 Phenol-d5	99	5.891	5.891	(0.942)	347807	10.0000	10.276
$ 158 2-Fluorophenol	112	4.870	4.870	(0.779)	298162	10.0000	10.612
$ 159 2,4,6-Tribromophenol	330	9.876	9.876	(0.938)	68164	10.0000	10.994

QC Flag Legend

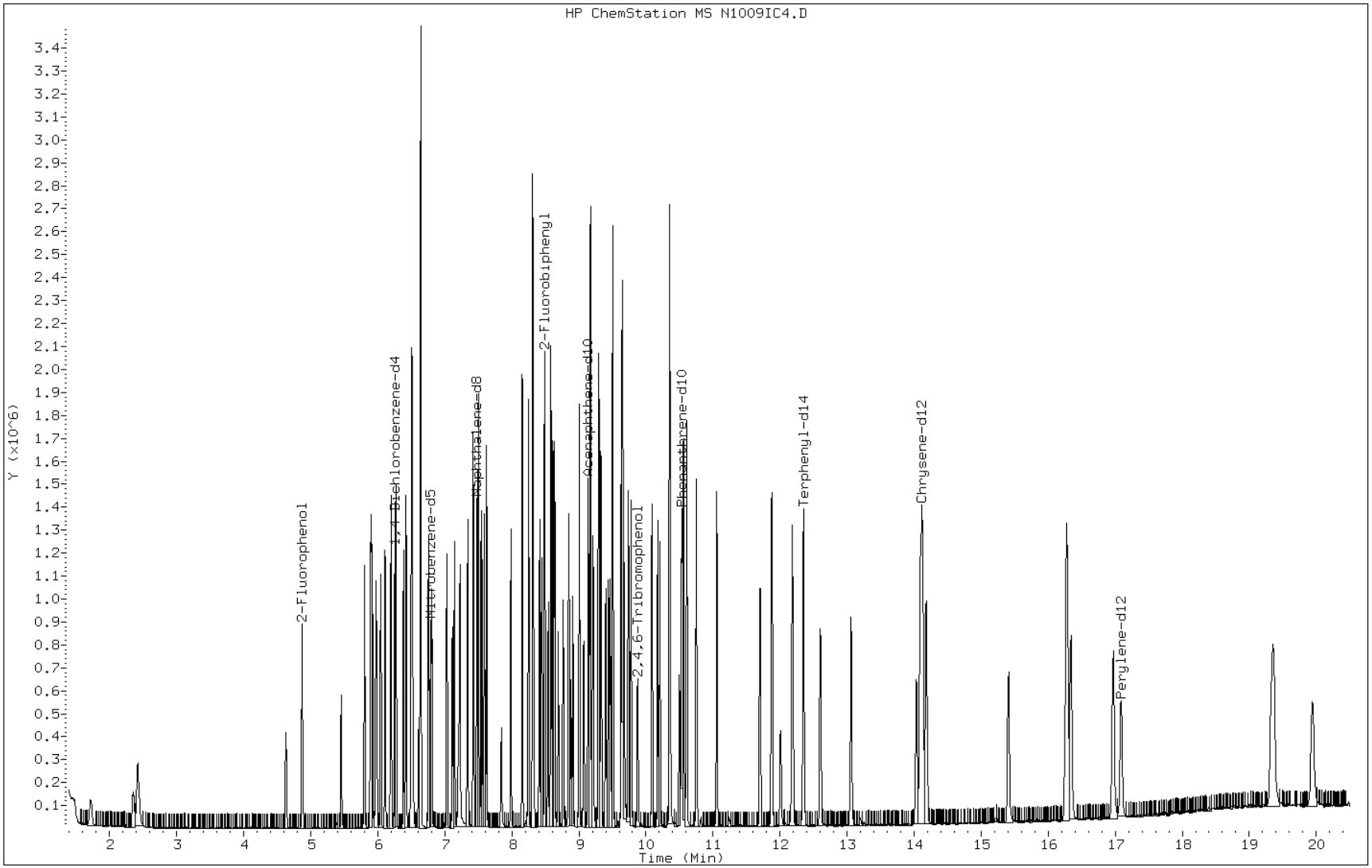
M - Compound response manually integrated.

Data File: N1009IC4.D

Date: 09-OCT-2013 06:40

Client ID: Instrument: 733.i

Sample Info: ICIS 976330 Operator: 3200



Manual Integration Report

Data File: N1009IC4.D
Inj. Date and Time: 09-OCT-2013 06:40
Instrument ID: 733.i
Client ID:
Compound: 198 1,4-Dioxane
CAS #: 123-91-1
Report Date: 10/09/2013

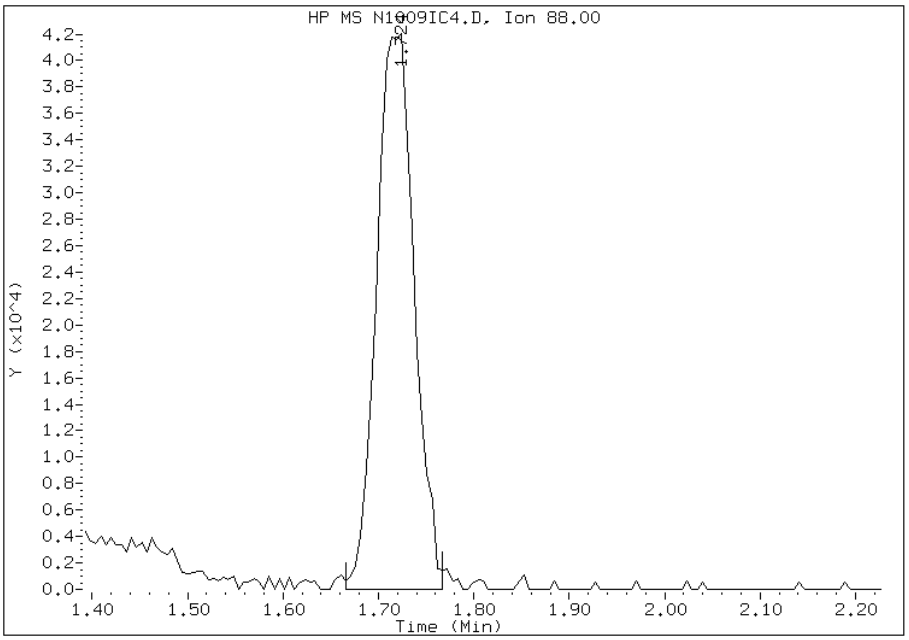
Processing Integration Results

RT: 1.72

Response: 115850

Amount: 10

Conc: 10



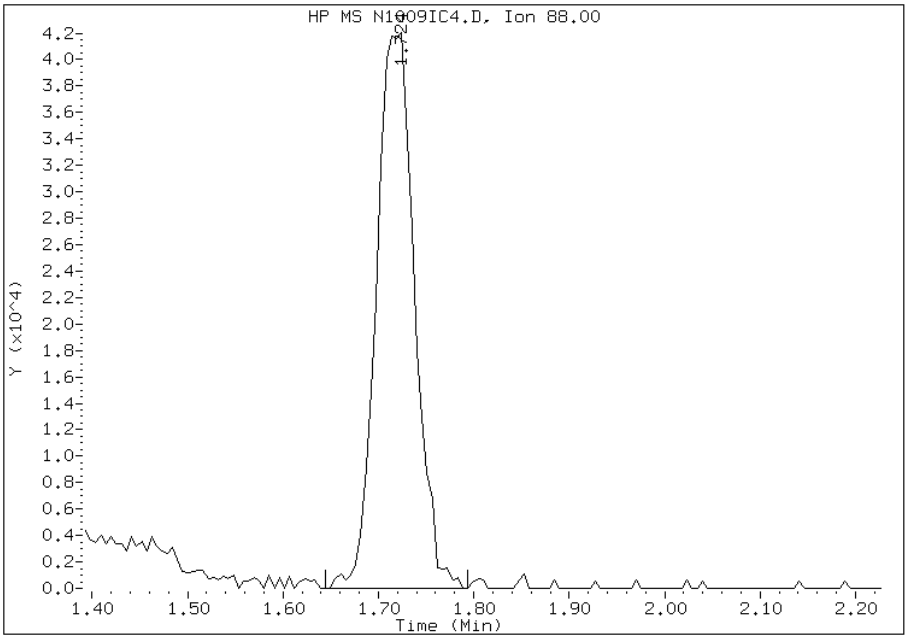
Manual Integration Results

RT: 1.72

Response: 117386

Amount: 9

Conc: 9



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:22
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC4.D
Inj. Date and Time: 09-OCT-2013 06:40
Instrument ID: 733.i
Client ID:
Compound: 10 N-Nitrosodimethylamine
CAS #: 62-75-9
Report Date: 10/09/2013

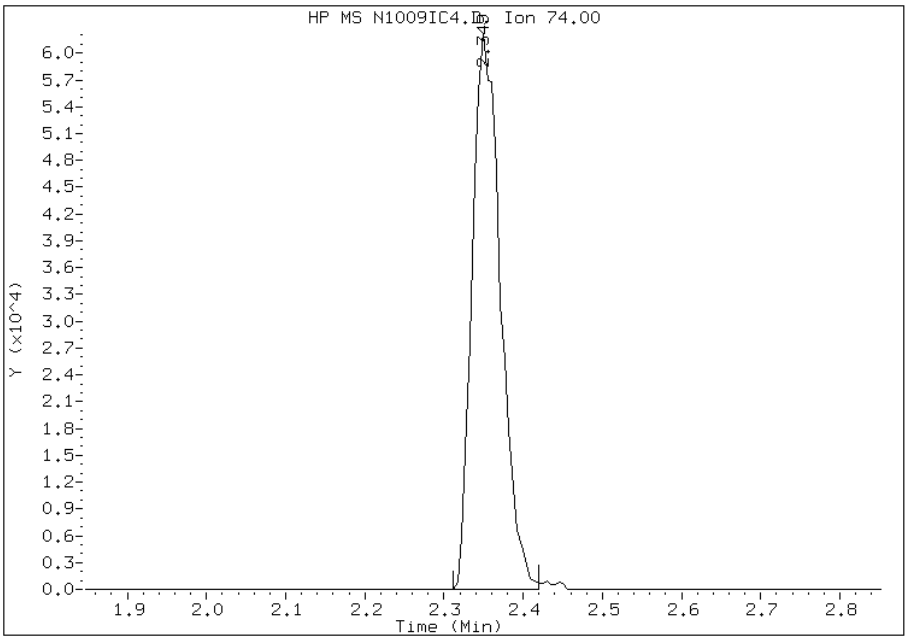
Processing Integration Results

RT: 2.35

Response: 154616

Amount: 10

Conc: 10



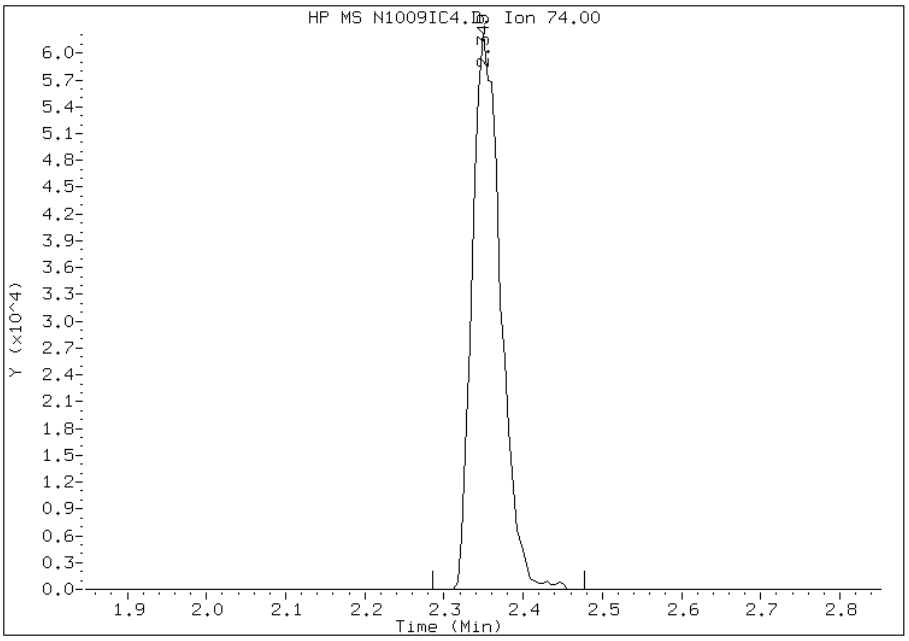
Manual Integration Results

RT: 2.35

Response: 155922

Amount: 11

Conc: 11



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:22
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC4.D
Inj. Date and Time: 09-OCT-2013 06:40
Instrument ID: 733.i
Client ID:
Compound: 9 Pyridine
CAS #: 110-86-1
Report Date: 10/09/2013

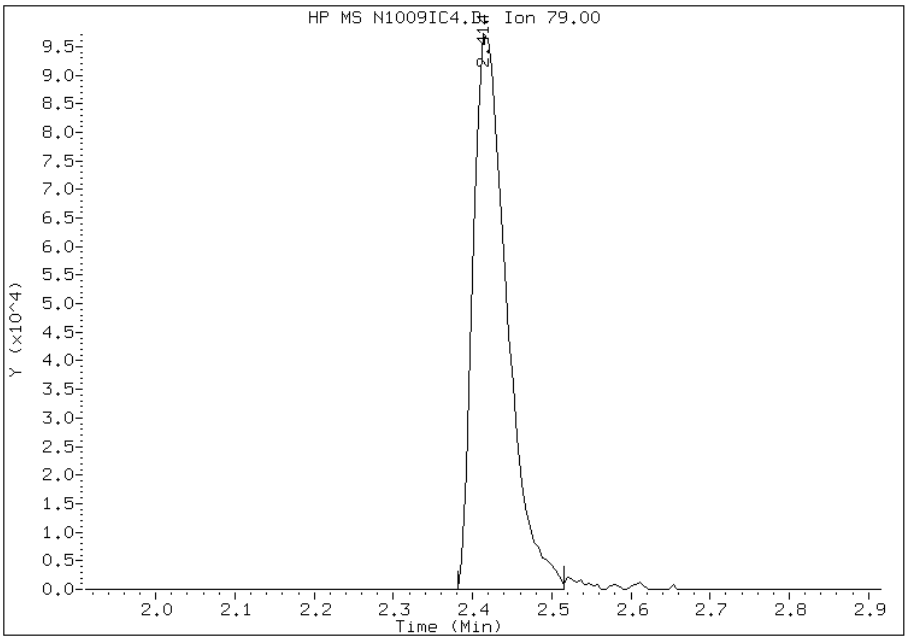
Processing Integration Results

RT: 2.41

Response: 286710

Amount: 11

Conc: 11



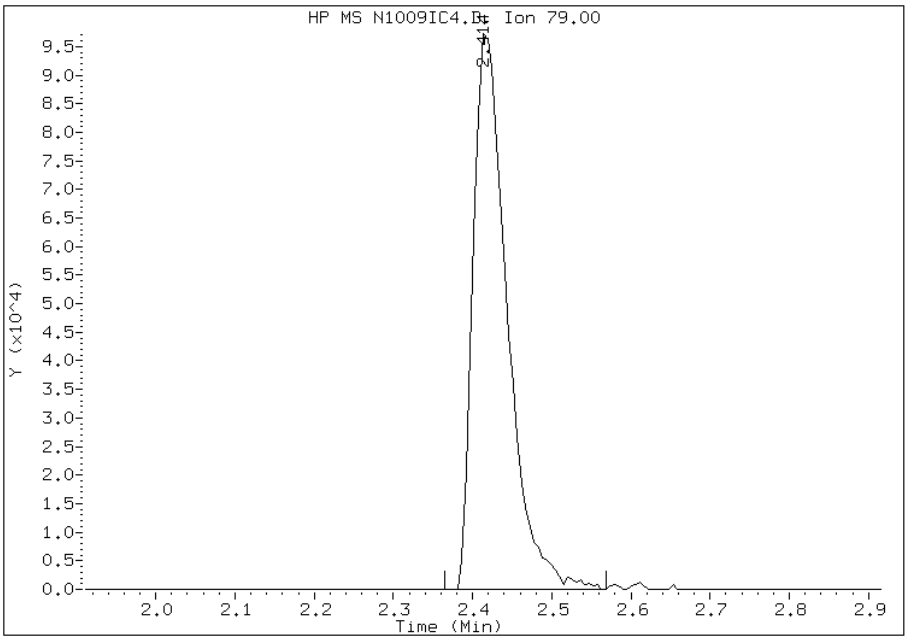
Manual Integration Results

RT: 2.41

Response: 289975

Amount: 11

Conc: 11



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:22
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC4.D
Inj. Date and Time: 09-OCT-2013 06:40
Instrument ID: 733.i
Client ID:
Compound: 49 Benzoic Acid
CAS #: 65-85-0
Report Date: 10/09/2013

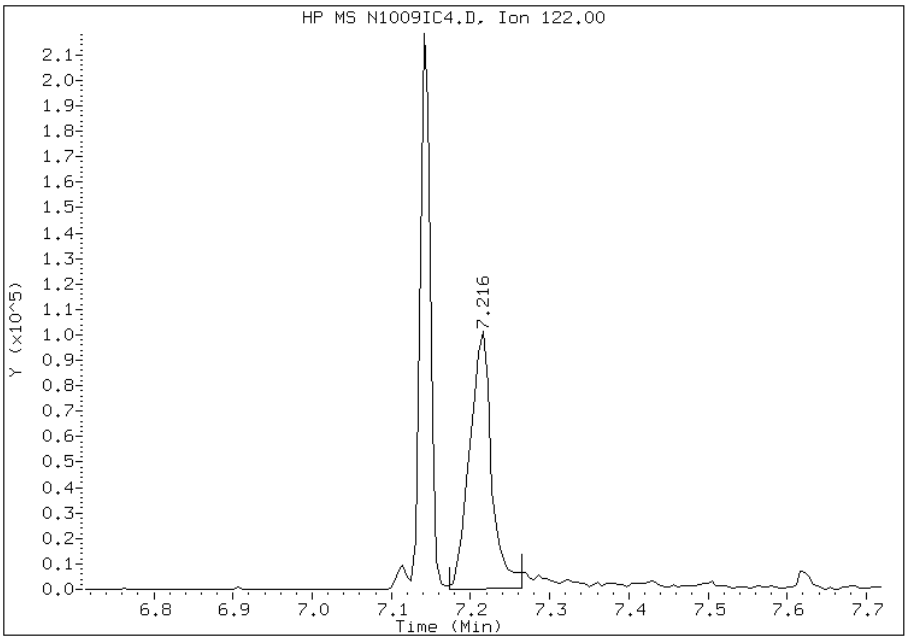
Processing Integration Results

RT: 7.22

Response: 191967

Amount: 26

Conc: 26



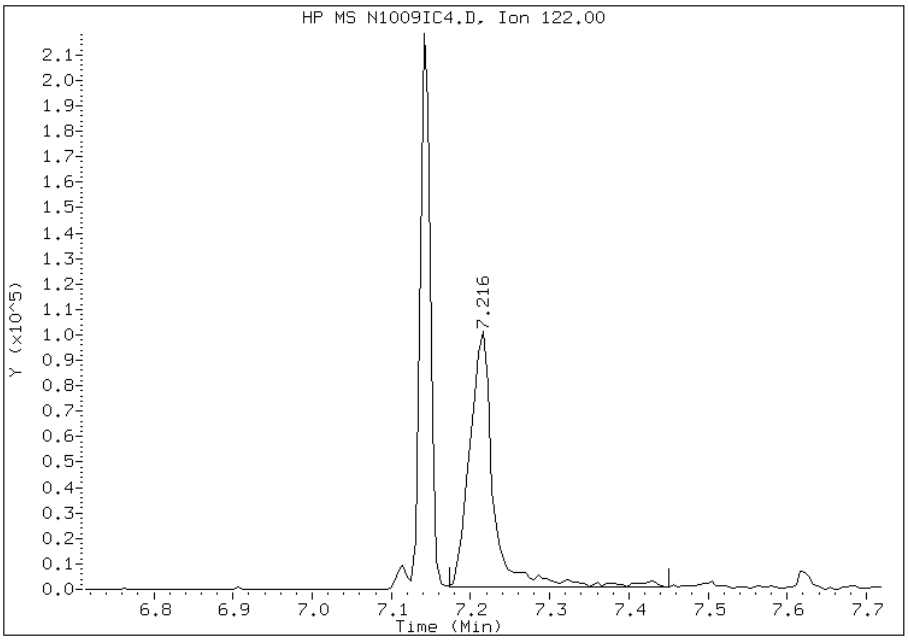
Manual Integration Results

RT: 7.22

Response: 209924

Amount: 33

Conc: 33



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:22
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC4.D
Inj. Date and Time: 09-OCT-2013 06:40
Instrument ID: 733.i
Client ID:
Compound: 98 4,6-Dinitro-2-methylphenol
CAS #: 534-52-1
Report Date: 10/09/2013

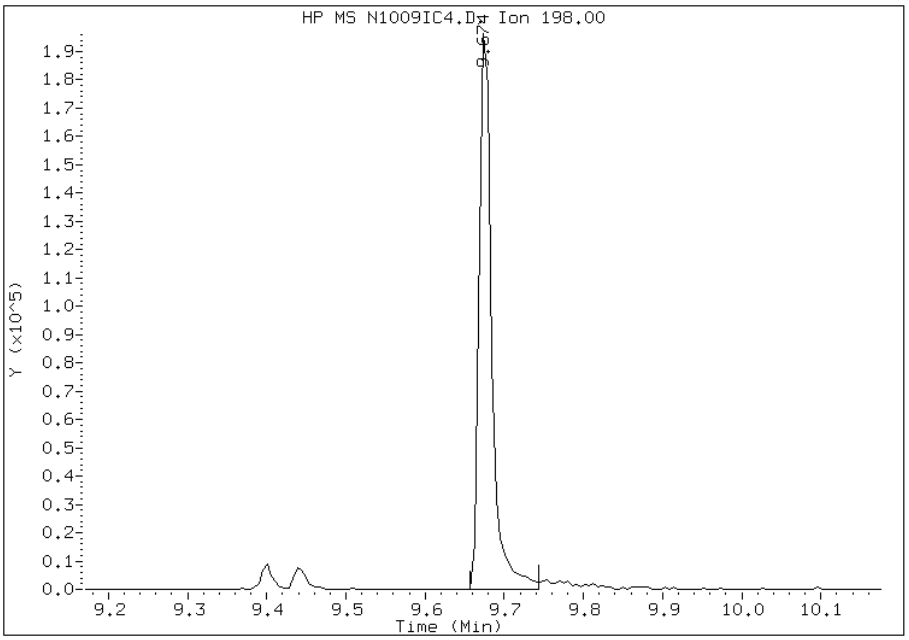
Processing Integration Results

RT: 9.67

Response: 215103

Amount: 25

Conc: 25



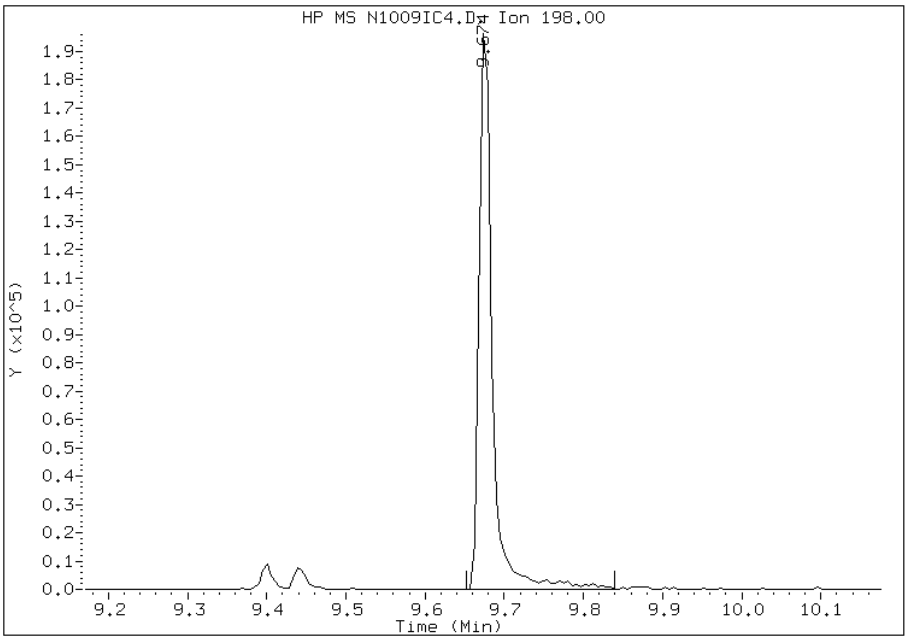
Manual Integration Results

RT: 9.67

Response: 224899

Amount: 29

Conc: 29



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:22
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC4.D
Inj. Date and Time: 09-OCT-2013 06:40
Instrument ID: 733.i
Client ID:
Compound: 146 Benzo(a)pyrene
CAS #: 50-32-8
Report Date: 10/09/2013

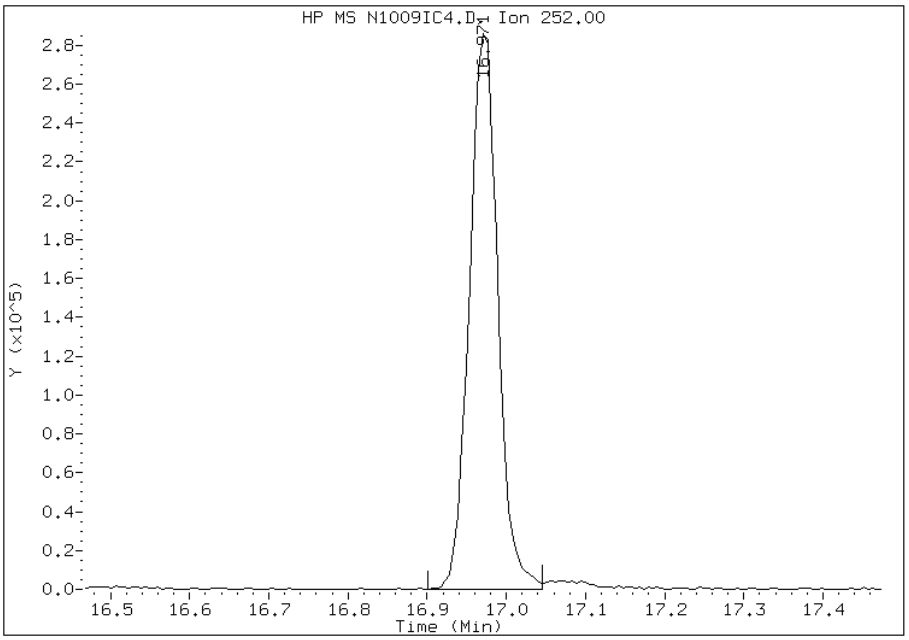
Processing Integration Results

RT: 16.97

Response: 708971

Amount: 10

Conc: 10



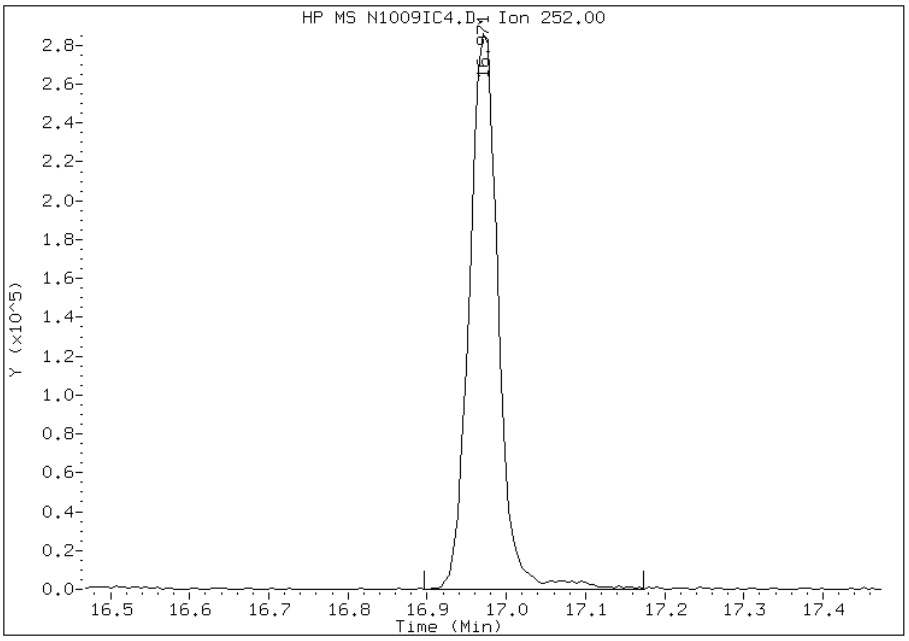
Manual Integration Results

RT: 16.97

Response: 726944

Amount: 10

Conc: 10



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:23
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC4.D
Inj. Date and Time: 09-OCT-2013 06:40
Instrument ID: 733.i
Client ID:
Compound: 149 Indeno(1,2,3-cd)pyrene
CAS #: 193-39-5
Report Date: 10/09/2013

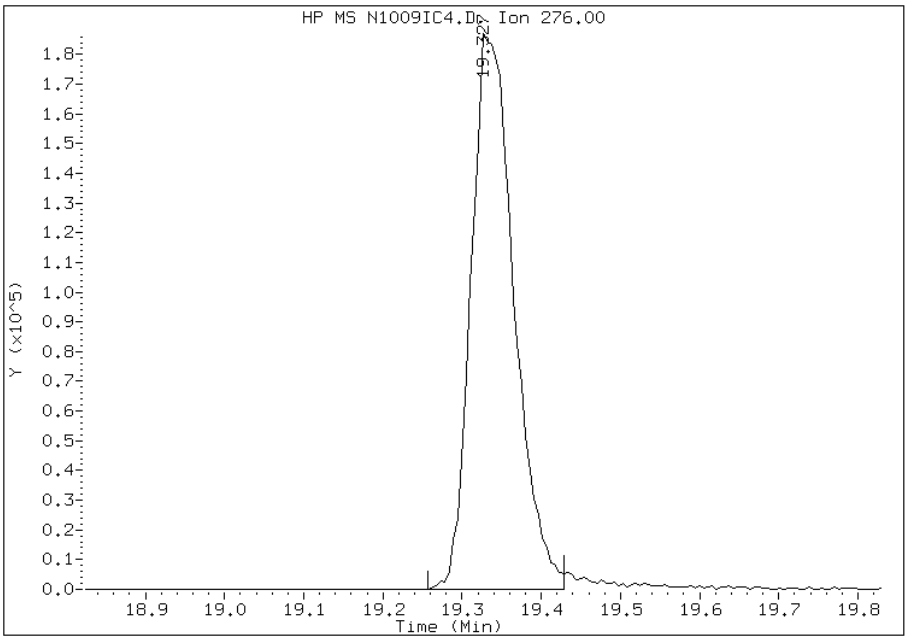
Processing Integration Results

RT: 19.33

Response: 701678

Amount: 10

Conc: 10



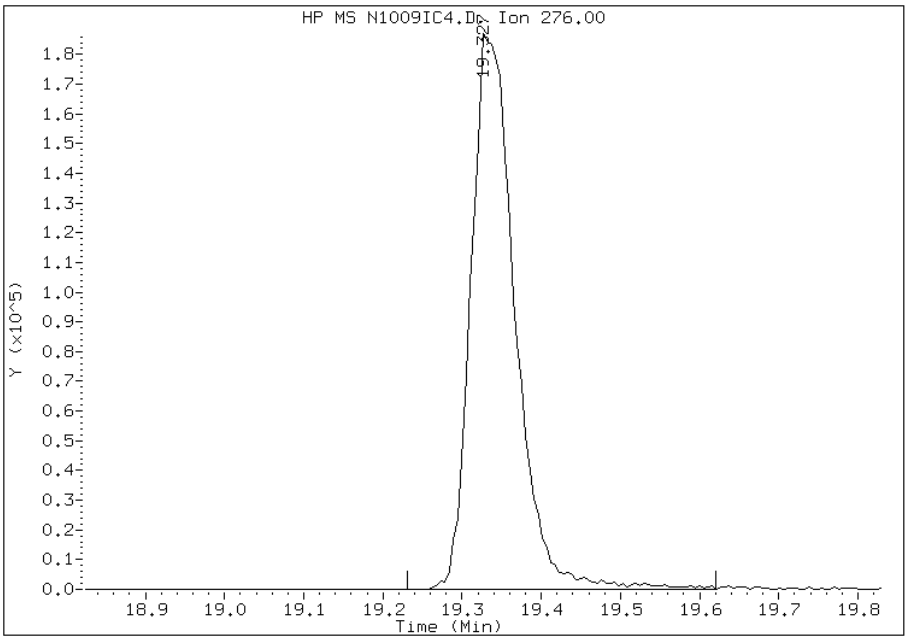
Manual Integration Results

RT: 19.33

Response: 722868

Amount: 10

Conc: 10



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:23
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC4.D
Inj. Date and Time: 09-OCT-2013 06:40
Instrument ID: 733.i
Client ID:
Compound: 150 Dibenz(a,h)anthracene
CAS #: 53-70-3
Report Date: 10/09/2013

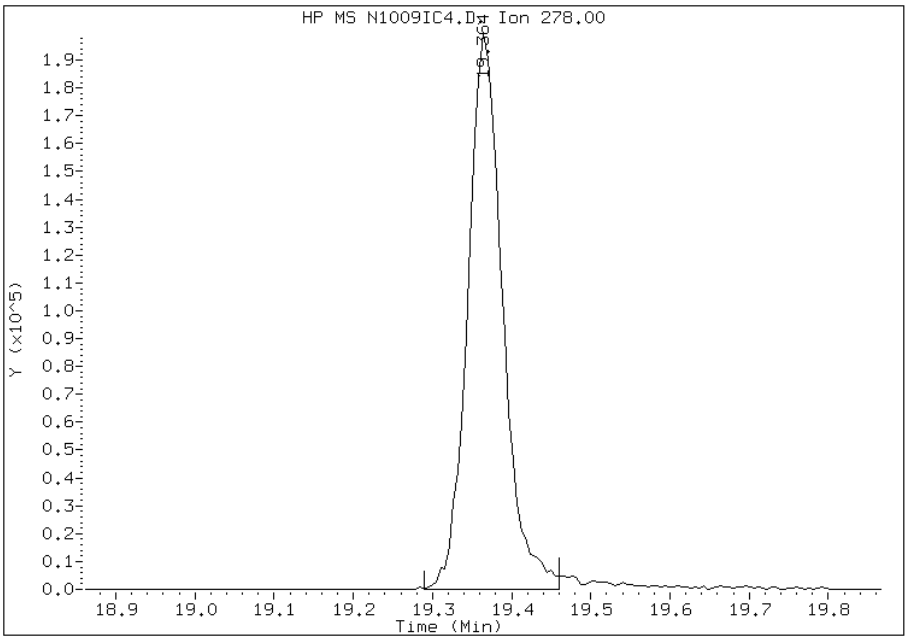
Processing Integration Results

RT: 19.36

Response: 608648

Amount: 10

Conc: 10



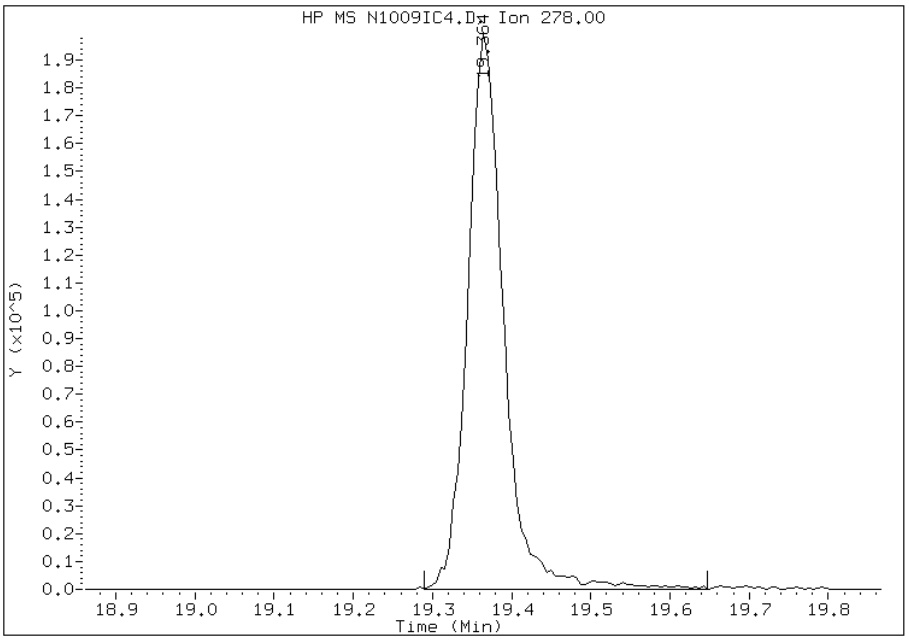
Manual Integration Results

RT: 19.36

Response: 629421

Amount: 11

Conc: 11



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:23
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC4.D
Inj. Date and Time: 09-OCT-2013 06:40
Instrument ID: 733.i
Client ID:
Compound: 151 Benzo(g,h,i)perylene
CAS #: 191-24-2
Report Date: 10/09/2013

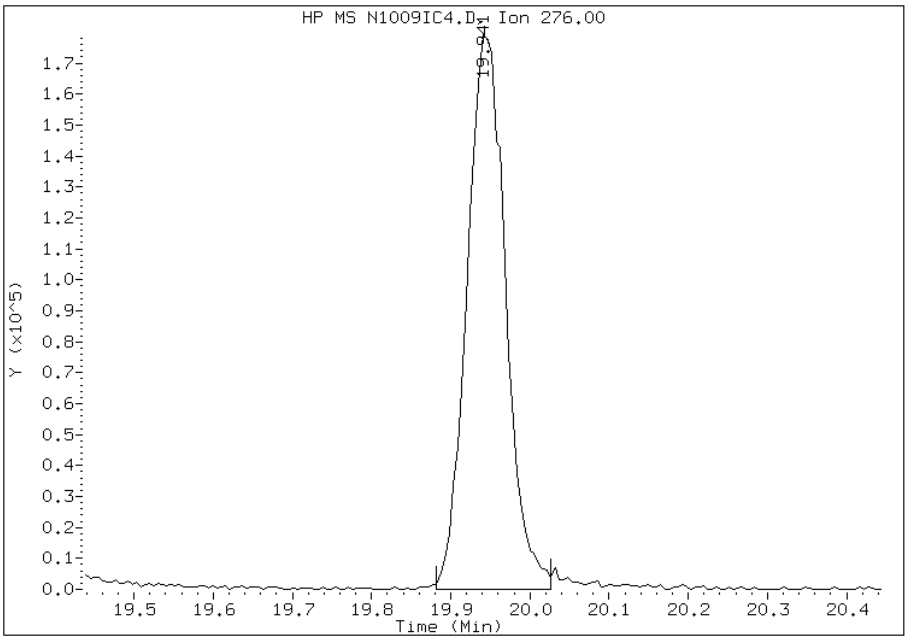
Processing Integration Results

RT: 19.94

Response: 604944

Amount: 10

Conc: 10



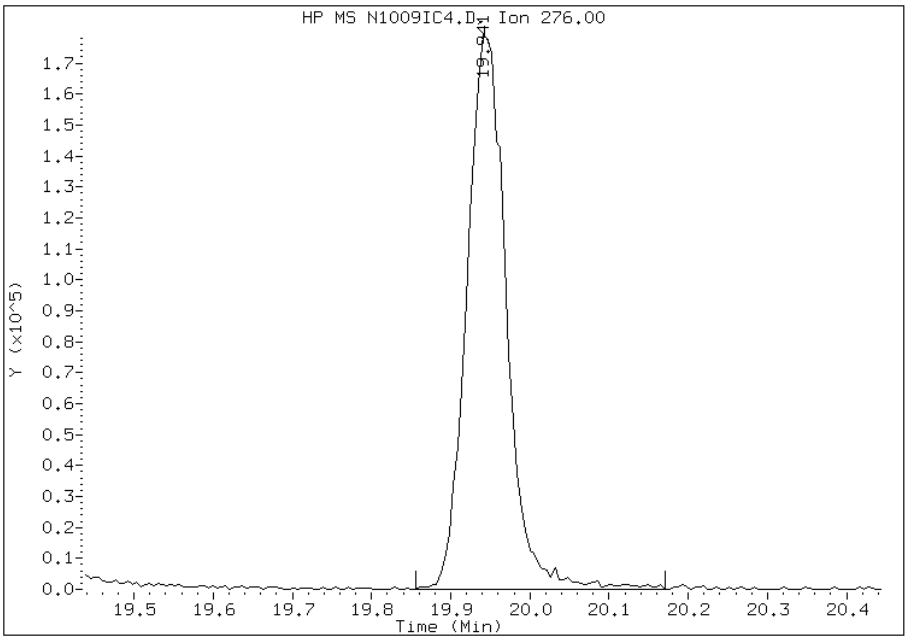
Manual Integration Results

RT: 19.94

Response: 622558

Amount: 11

Conc: 11



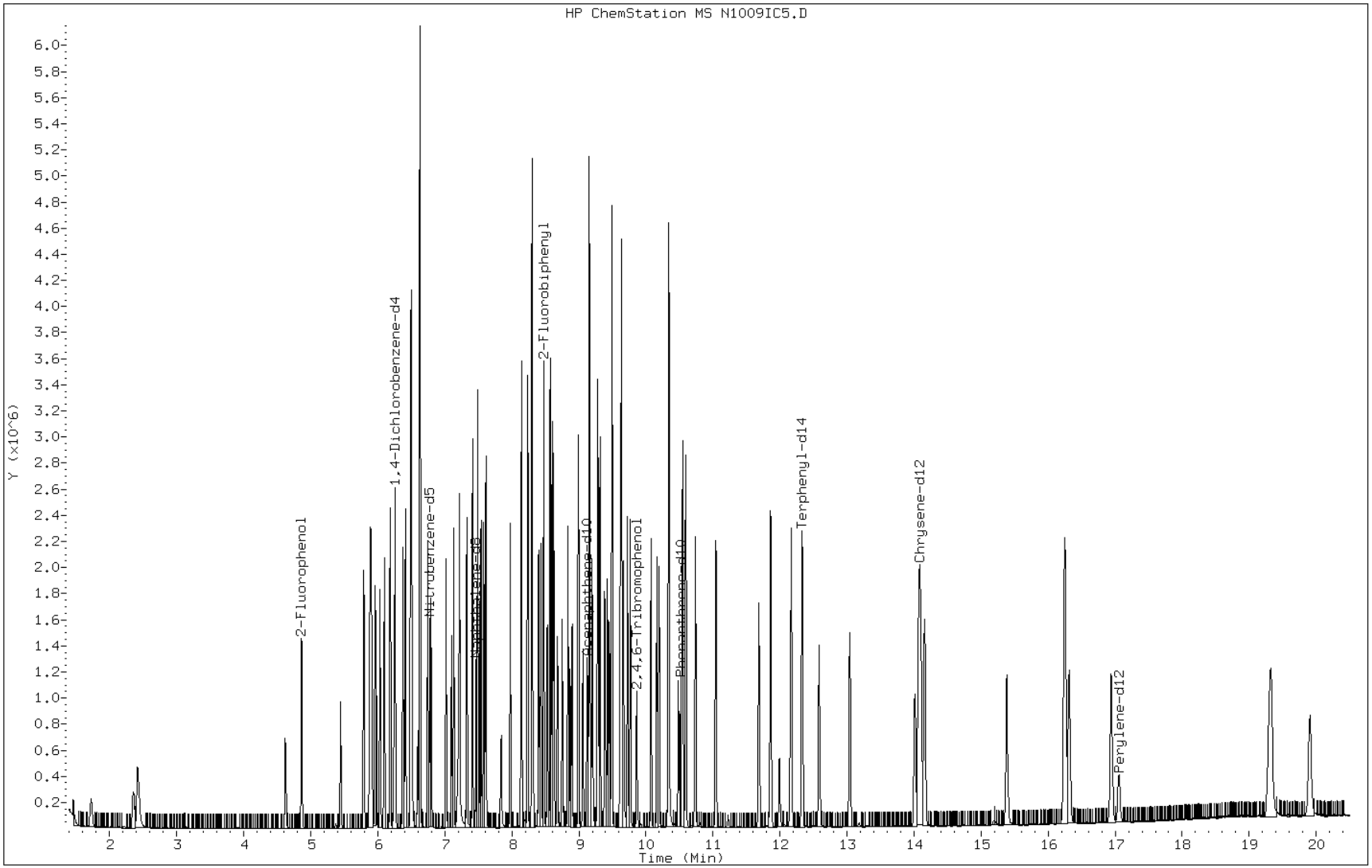
Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:23
Manual Integration Reason: Poor Chromatography

Data File: N1009IC5.D

Date: 09-OCT-2013 07:06

Client ID: Instrument: 733.i

Sample Info: IC 839802 Operator: 3200



Manual Integration Report

Data File: N1009IC5.D
Inj. Date and Time: 09-OCT-2013 07:06
Instrument ID: 733.i
Client ID:
Compound: 9 Pyridine
CAS #: 110-86-1
Report Date: 10/09/2013

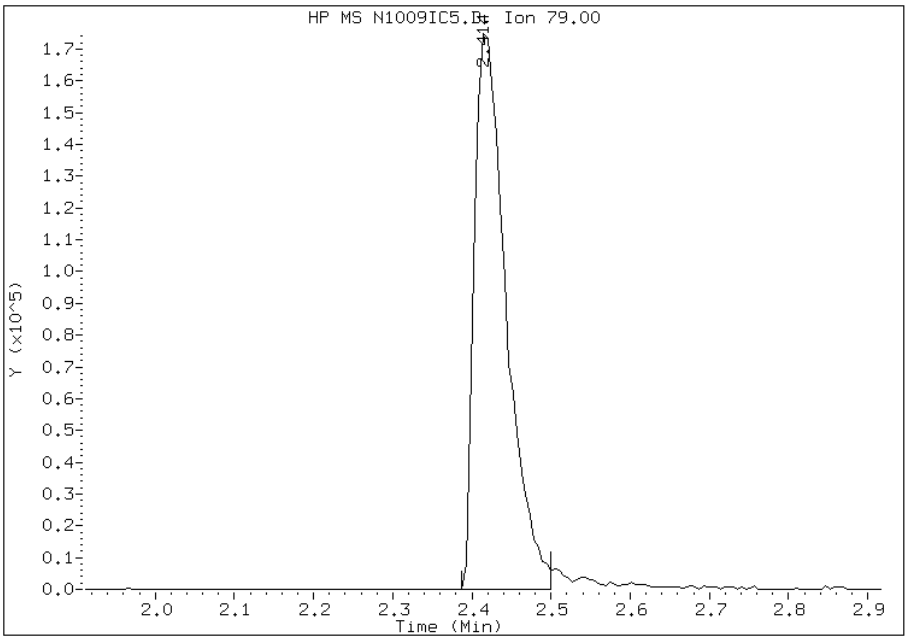
Processing Integration Results

RT: 2.41

Response: 488139

Amount: 27

Conc: 27



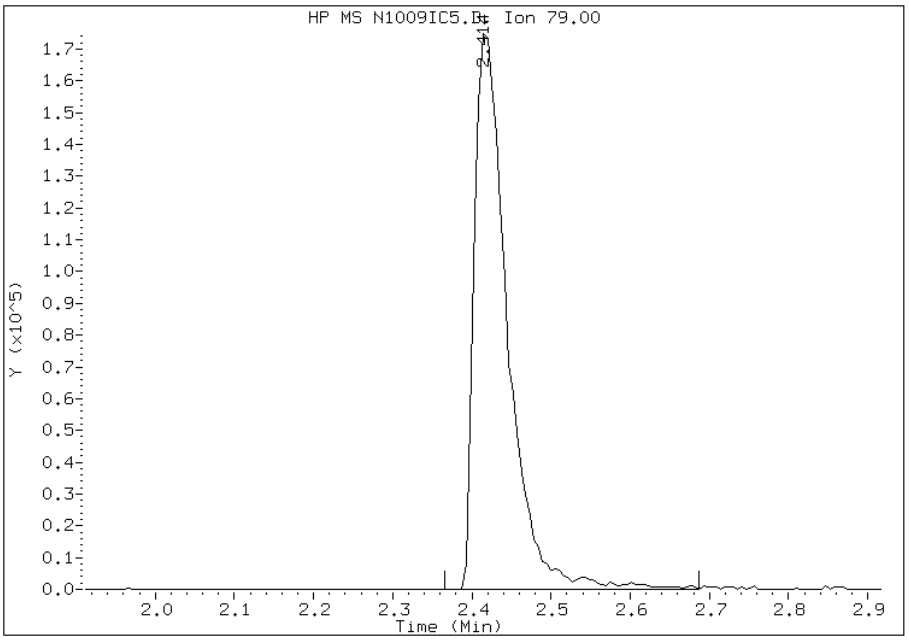
Manual Integration Results

RT: 2.41

Response: 509966

Amount: 23

Conc: 23



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:24
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC5.D
Inj. Date and Time: 09-OCT-2013 07:06
Instrument ID: 733.i
Client ID:
Compound: 32 N-Nitroso-di-n-propylamine
CAS #: 621-64-7
Report Date: 10/09/2013

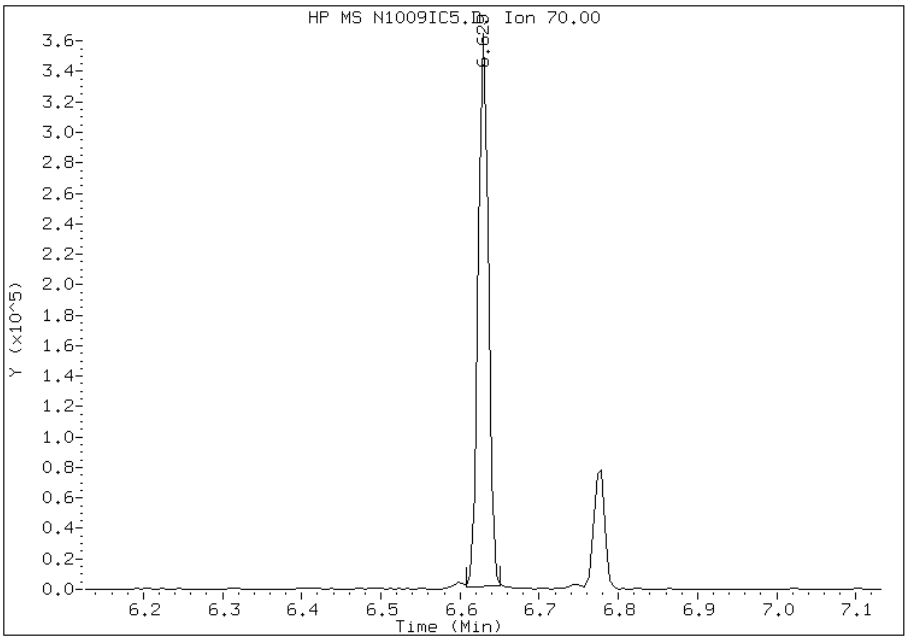
Processing Integration Results

RT: 6.63

Response: 315541

Amount: 20

Conc: 20



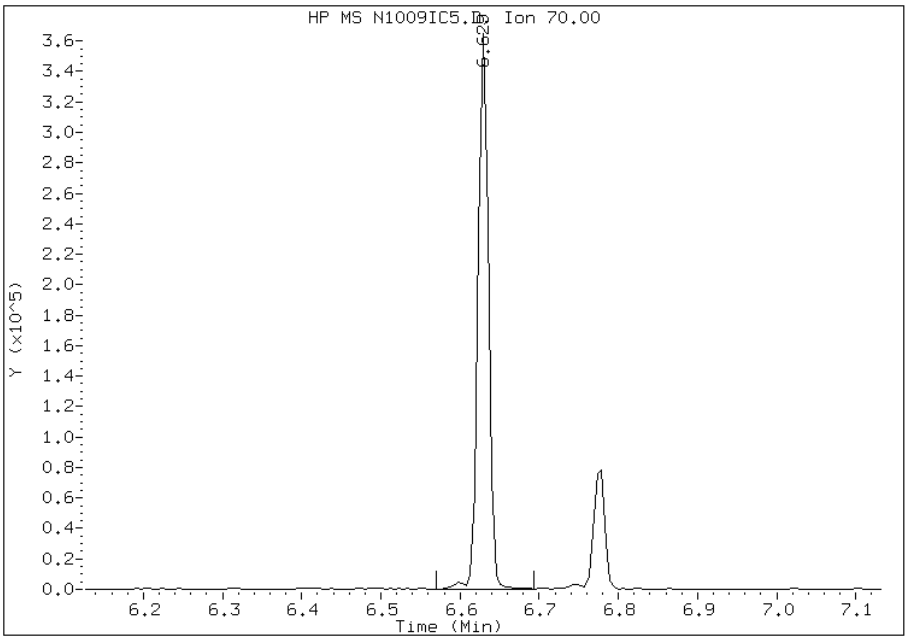
Manual Integration Results

RT: 6.63

Response: 328170

Amount: 20

Conc: 20



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:24
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC5.D
Inj. Date and Time: 09-OCT-2013 07:06
Instrument ID: 733.i
Client ID:
Compound: 49 Benzoic Acid
CAS #: 65-85-0
Report Date: 10/09/2013

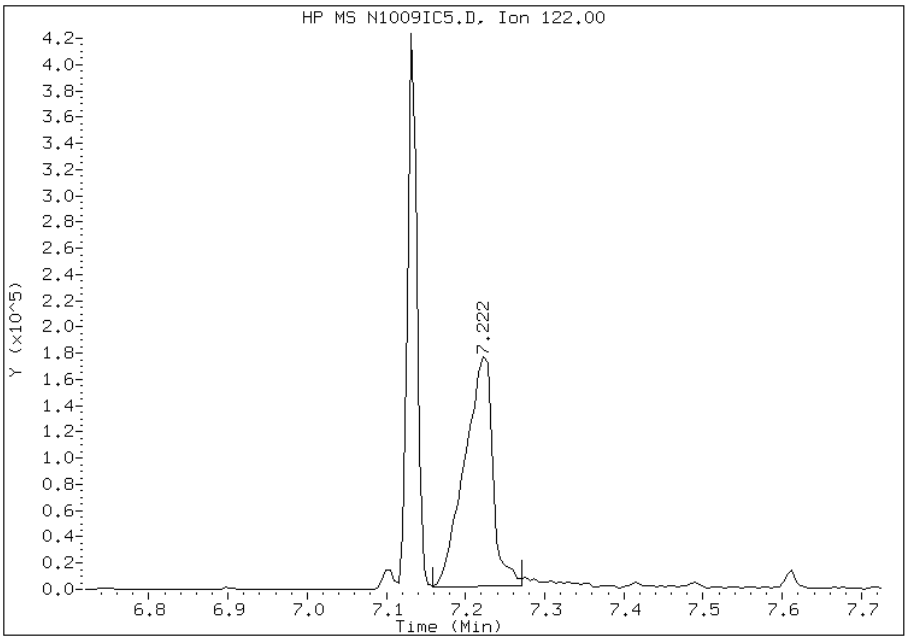
Processing Integration Results

RT: 7.22

Response: 432137

Amount: 68

Conc: 68



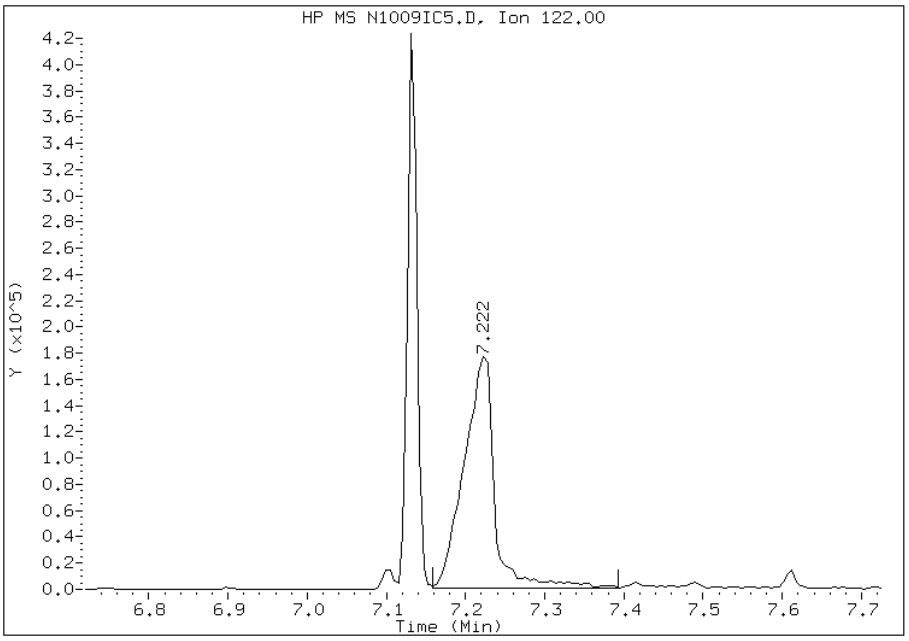
Manual Integration Results

RT: 7.22

Response: 463377

Amount: 71

Conc: 71



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:24
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC5.D
Inj. Date and Time: 09-OCT-2013 07:06
Instrument ID: 733.i
Client ID:
Compound: 208 Caprolactam
CAS #: 105-60-2
Report Date: 10/09/2013

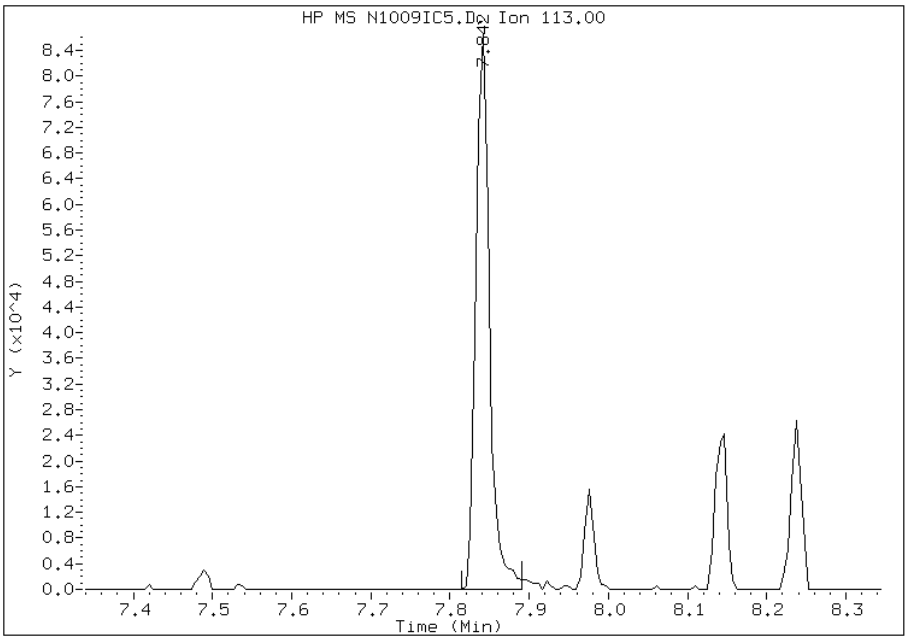
Processing Integration Results

RT: 7.84

Response: 102589

Amount: 22

Conc: 22



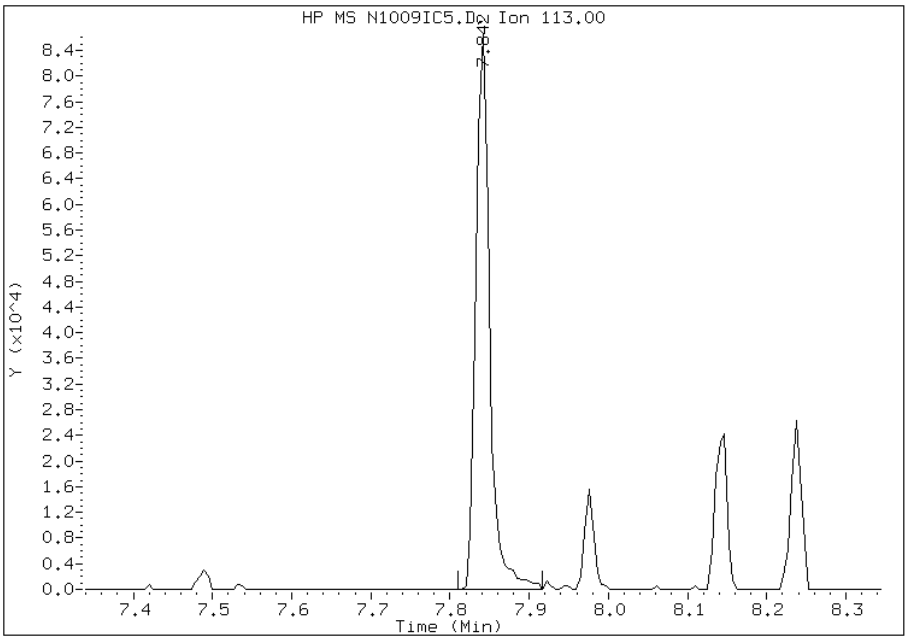
Manual Integration Results

RT: 7.84

Response: 104064

Amount: 22

Conc: 22



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:25
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC5.D
Inj. Date and Time: 09-OCT-2013 07:06
Instrument ID: 733.i
Client ID:
Compound: 124 Benzidine
CAS #: 92-87-5
Report Date: 10/09/2013

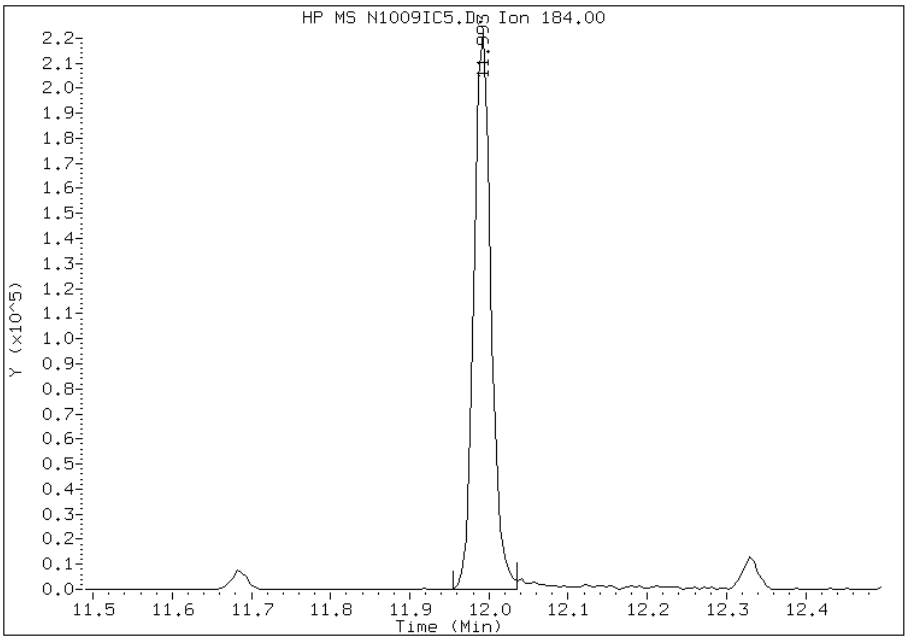
Processing Integration Results

RT: 11.99

Response: 332019

Amount: 18

Conc: 18



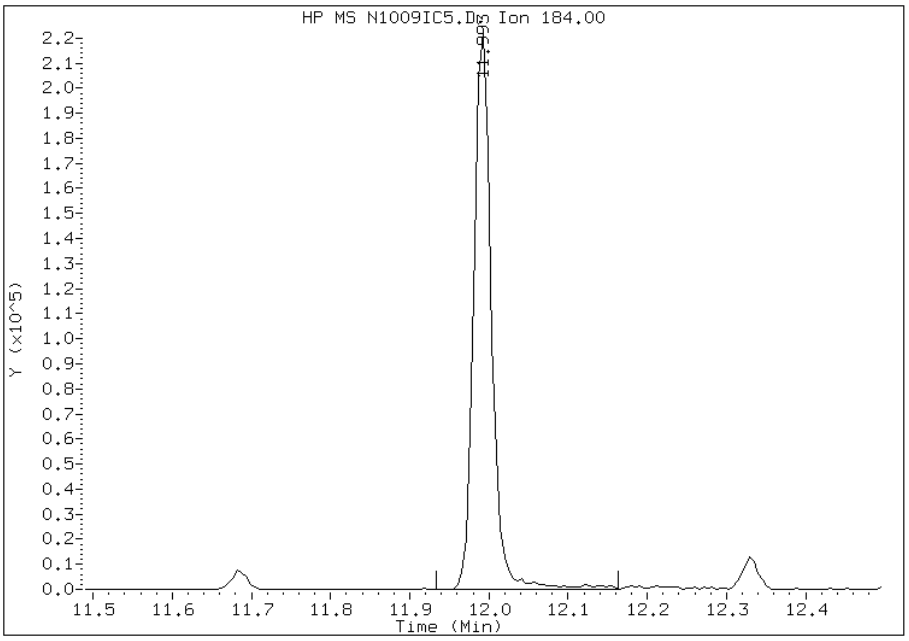
Manual Integration Results

RT: 11.99

Response: 344184

Amount: 19

Conc: 19



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:25
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC5.D
Inj. Date and Time: 09-OCT-2013 07:06
Instrument ID: 733.i
Client ID:
Compound: 135 3,3'-Dichlorobenzidine
CAS #: 91-94-1
Report Date: 10/09/2013

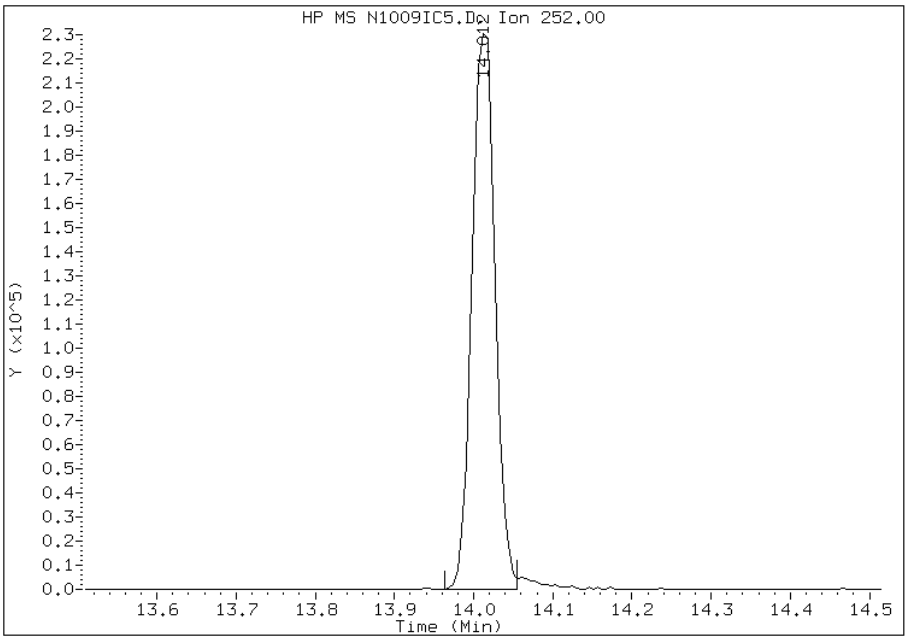
Processing Integration Results

RT: 14.01

Response: 465548

Amount: 22

Conc: 22



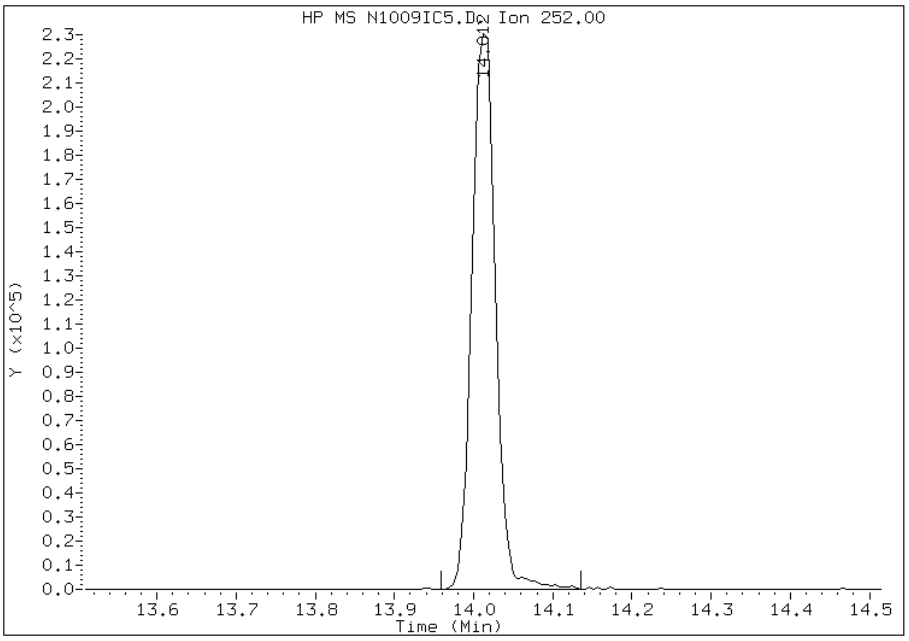
Manual Integration Results

RT: 14.01

Response: 475611

Amount: 23

Conc: 23



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:25
Manual Integration Reason: Poor Chromatography

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN100913D.b\N1009IC6.D
Lab Smp Id: IC 839804
Inj Date : 09-OCT-2013 07:31
Operator : 3200 Inst ID: 733.i
Smp Info : IC 839804
Misc Info : TN100913D.b,T8270d.m,tapitt.sub
Comment :
Method : \\PITSVR06\D\chem\733.i\TN100913D.b\T8270d.m
Meth Date : 08-Oct-2013 08:32 piccolinov Quant Type: ISTD
Cal Date : 09-OCT-2013 07:31 Cal File: N1009IC6.D
Als bottle: 7 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: tapitt.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 1	1,4-Dichlorobenzene-d4	152	6.244	6.244	(1.000)	146136	8.00000	
* 2	Naphthalene-d8	136	7.467	7.467	(1.000)	484435	8.00000	
* 3	Acenaphthene-d10	164	9.123	9.123	(1.000)	278391	8.00000	
* 4	Phenanthrene-d10	188	10.523	10.523	(1.000)	434172	8.00000	
* 5	Chrysene-d12	240	14.112	14.112	(1.000)	447256	8.00000	
* 6	Perylene-d12	264	17.061	17.061	(1.000)	352084	8.00000	
198	1,4-Dioxane	88	1.724	1.724	(0.276)	559140	60.0000	58.332
10	N-Nitrosodimethylamine	74	2.360	2.360	(0.378)	730208	60.0000	62.616
9	Pyridine	79	2.413	2.413	(0.387)	1107431	60.0000	55.431
16	Methyl methanesulfonate	80	4.630	4.630	(0.742)	766030	60.0000	54.982
206	Benzaldehyde	77	5.795	5.795	(0.928)	991228	60.0000	54.241
21	Aniline	93	5.912	5.912	(0.947)	1823867	60.0000	56.831
22	Phenol	94	5.902	5.902	(0.945)	1805750	60.0000	59.342
23	bis(2-Chloroethyl)ether	93	5.976	5.976	(0.957)	1172561	60.0000	60.735
24	2-Chlorophenol	128	6.035	6.035	(0.967)	1439058	60.0000	60.298
226	n-Decane	43	6.099	6.099	(0.977)	1081785	60.0000	59.940
26	1,3-Dichlorobenzene	146	6.190	6.190	(0.991)	1743239	60.0000	61.123
27	1,4-Dichlorobenzene	146	6.260	6.260	(1.003)	1777241	60.0000	60.338
28	1,2-Dichlorobenzene	146	6.409	6.409	(1.027)	1648410	60.0000	59.898
217	Indene	116	6.500	6.500	(1.041)	2557067	60.0000	64.374
29	Benzyl Alcohol	108	6.377	6.377	(1.021)	823928	60.0000	62.703
30	2-Methylphenol	108	6.495	6.495	(1.040)	1241064	60.0000	62.238
31	2,2'-oxybis(1-Chloropropane)	45	6.511	6.511	(1.043)	1260386	60.0000	59.547
37	Acetophenone	105	6.633	6.633	(1.062)	1888655	60.0000	56.832
32	N-Nitroso-di-n-propylamine	70	6.633	6.633	(1.062)	878517	60.0000	60.375
192	4-Methylphenol	108	6.633	6.633	(1.062)	1320086	60.0000	63.952
34	Hexachloroethane	117	6.746	6.746	(1.080)	669258	60.0000	60.726
77	1,3-Dinitrobenzene	168	8.872	8.872	(0.972)	445481	60.0000	66.476
35	Nitrobenzene	77	6.794	6.794	(0.910)	1311569	60.0000	60.414

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
36	N-Nitrosopyrrolidine	100	6.607	6.607	(1.058)	505606	60.0000	58.339
41	Isophorone	82	7.018	7.018	(0.940)	2214370	60.0000	64.370
42	2-Nitrophenol	139	7.104	7.104	(0.951)	779318	60.0000	67.227
43	2,4-Dimethylphenol	107	7.130	7.130	(0.955)	1282247	60.0000	69.248
44	bis(2-Chloroethoxy)methane	93	7.216	7.216	(0.966)	1371272	60.0000	64.042
48	2,4-Dichlorophenol	162	7.328	7.328	(0.981)	1243867	60.0000	63.747
49	Benzoic Acid	122	7.269	7.269	(0.974)	1312703	120.000	200.44(M)
50	1,2,4-Trichlorobenzene	180	7.413	7.413	(0.993)	1491351	60.0000	62.228
51	Naphthalene	128	7.488	7.488	(1.003)	4039807	60.0000	63.580
52	4-Chloroaniline	127	7.531	7.531	(1.009)	1623029	60.0000	63.573
54	2,6-Dichlorophenol	162	7.542	7.542	(1.010)	1205517	60.0000	64.231
56	Hexachlorobutadiene	225	7.611	7.611	(1.019)	1010727	60.0000	62.558
208	Caprolactam	113	7.868	7.868	(1.054)	302309	60.0000	71.761(M)
59	4-Chloro-3-Methylphenol	107	7.974	7.974	(1.068)	1082586	60.0000	62.686
62	2-Methylnaphthalene	142	8.140	8.140	(1.090)	2815030	60.0000	63.762
63	1-Methylnaphthalene	142	8.236	8.236	(1.103)	2564965	60.0000	63.356
64	Hexachlorocyclopentadiene	237	8.295	8.295	(0.909)	1234770	60.0000	71.416
65	1,2,4,5-Tetrachlorobenzene	216	8.306	8.306	(0.910)	1597401	60.0000	60.850
66	2,4,6-Trichlorophenol	196	8.402	8.402	(0.921)	913289	60.0000	63.644
67	2,4,5-Trichlorophenol	196	8.439	8.439	(0.925)	975395	60.0000	64.248
209	1,1'-Biphenyl	154	8.573	8.573	(0.940)	3269661	60.0000	61.126
70	2-Chloronaphthalene	162	8.599	8.599	(0.943)	2871986	60.0000	62.603
73	2-Nitroaniline	65	8.680	8.680	(0.951)	634843	60.0000	64.047
76	Dimethylphthalate	163	8.840	8.840	(0.969)	2731022	60.0000	60.897
78	2,6-Dinitrotoluene	165	8.899	8.899	(0.975)	623755	60.0000	63.674
79	Acenaphthylene	152	8.995	8.995	(0.986)	4065645	60.0000	64.056
81	3-Nitroaniline	138	9.064	9.064	(0.994)	615420	60.0000	62.375
82	Acenaphthene	153	9.155	9.155	(1.004)	2635053	60.0000	63.053
83	2,4-Dinitrophenol	184	9.160	9.160	(1.004)	913359	120.000	208.35
85	4-Nitrophenol	109	9.203	9.203	(1.009)	748984	120.000	141.17
86	Dibenzofuran	168	9.315	9.315	(1.021)	3496797	60.0000	60.644
87	2,4-Dinitrotoluene	165	9.283	9.283	(1.018)	854498	60.0000	68.400
91	2,3,5,6-Tetrachlorophenol	232	9.390	9.390	(1.029)	855403	60.0000	73.563
88	2,3,4,6-Tetrachlorophenol	232	9.427	9.427	(1.033)	838194	60.0000	63.589
92	2-Naphthylamine	143	9.459	9.459	(1.037)	722021	60.0000	26.129
93	Diethylphthalate	149	9.492	9.492	(1.040)	2602626	60.0000	62.052
230	n-Hexadecane	57	9.497	9.497	(1.272)	1347616	60.0000	69.062
94	Fluorene	166	9.641	9.641	(1.057)	2874945	60.0000	62.275
95	4-Chlorophenyl-phenylether	204	9.620	9.620	(1.054)	1575076	60.0000	61.380
96	4-Nitroaniline	138	9.641	9.641	(1.057)	616043	60.0000	65.662
98	4,6-Dinitro-2-methylphenol	198	9.668	9.668	(0.919)	1030895	120.000	161.84
99	N-Nitrosodiphenylamine (1)	169	9.727	9.727	(0.924)	1880254	60.0000	65.266
100	1,2-Diphenylhydrazine	77	9.769	9.769	(0.928)	2388157	60.0000	64.540
106	4-Bromophenyl-phenylether	248	10.079	10.079	(0.958)	892090	60.0000	63.256
107	Hexachlorobenzene	284	10.165	10.165	(0.966)	847059	60.0000	64.275
210	Atrazine	200	10.202	10.202	(0.970)	624990	60.0000	53.671(M)
227	n-Octadecane	57	10.346	10.346	(1.657)	1276387	60.0000	62.009
111	Pentachlorophenol	266	10.336	10.336	(0.982)	1217739	120.000	168.07
115	Phenanthrene	178	10.544	10.544	(1.002)	3855172	60.0000	64.577
116	Anthracene	178	10.597	10.597	(1.007)	3721417	60.0000	62.640
119	Carbazole	167	10.742	10.742	(1.021)	3219467	60.0000	62.257
120	Di-n-Butylphthalate	149	11.046	11.046	(1.050)	3745485	60.0000	64.571
123	Fluoranthene	202	11.863	11.863	(1.127)	4241623	60.0000	63.235
124	Benzidine	184	11.992	11.992	(0.850)	670037	60.0000	40.428

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
125 Pyrene	202	12.168	12.168	(0.862)	4114742	60.0000	57.920
131 Butylbenzylphthalate	149	13.039	13.039	(0.924)	1515008	60.0000	64.268
135 3,3'-Dichlorobenzidine	252	14.016	14.016	(0.993)	1420737	60.0000	69.134
136 Benzo(a)Anthracene	228	14.091	14.091	(0.998)	3816731	60.0000	59.350
137 Chrysene	228	14.161	14.161	(1.003)	3407037	60.0000	59.336
139 bis(2-ethylhexyl)Phthalate	149	14.070	14.070	(0.997)	2085333	60.0000	70.123
140 Di-n-octylphthalate	149	15.389	15.389	(0.902)	3427323	60.0000	73.521
141 Benzo(b)fluoranthene	252	16.265	16.265	(0.953)	3711529	60.0000	61.575
142 Benzo(k)fluoranthene	252	16.324	16.324	(0.957)	3723567	60.0000	60.805
143 7,12-dimethylbenz[a]anthracen	256	16.255	16.255	(0.953)	1765374	60.0000	71.212
146 Benzo(a)pyrene	252	16.949	16.949	(0.993)	3368483	60.0000	63.497
149 Indeno(1,2,3-cd)pyrene	276	19.316	19.316	(1.132)	3601564	60.0000	66.598
150 Dibenz(a,h)anthracene	278	19.342	19.342	(1.134)	3024933	60.0000	66.362
151 Benzo(g,h,i)perylene	276	19.925	19.925	(1.168)	2999933	60.0000	66.673
$ 154 Nitrobenzene-d5	82	6.778	6.778	(0.908)	1339134	60.0000	62.126
$ 155 2-Fluorobiphenyl	172	8.477	8.477	(0.929)	3139069	60.0000	61.316
$ 156 Terphenyl-d14	244	12.334	12.334	(0.874)	3071238	60.0000	58.008
$ 157 Phenol-d5	99	5.886	5.886	(0.943)	1617320	60.0000	60.948
$ 158 2-Fluorophenol	112	4.865	4.865	(0.779)	1416039	60.0000	63.182
$ 159 2,4,6-Tribromophenol	330	9.865	9.865	(0.938)	324973	60.0000	70.895

QC Flag Legend

M - Compound response manually integrated.

Data File: N1009IC6.D

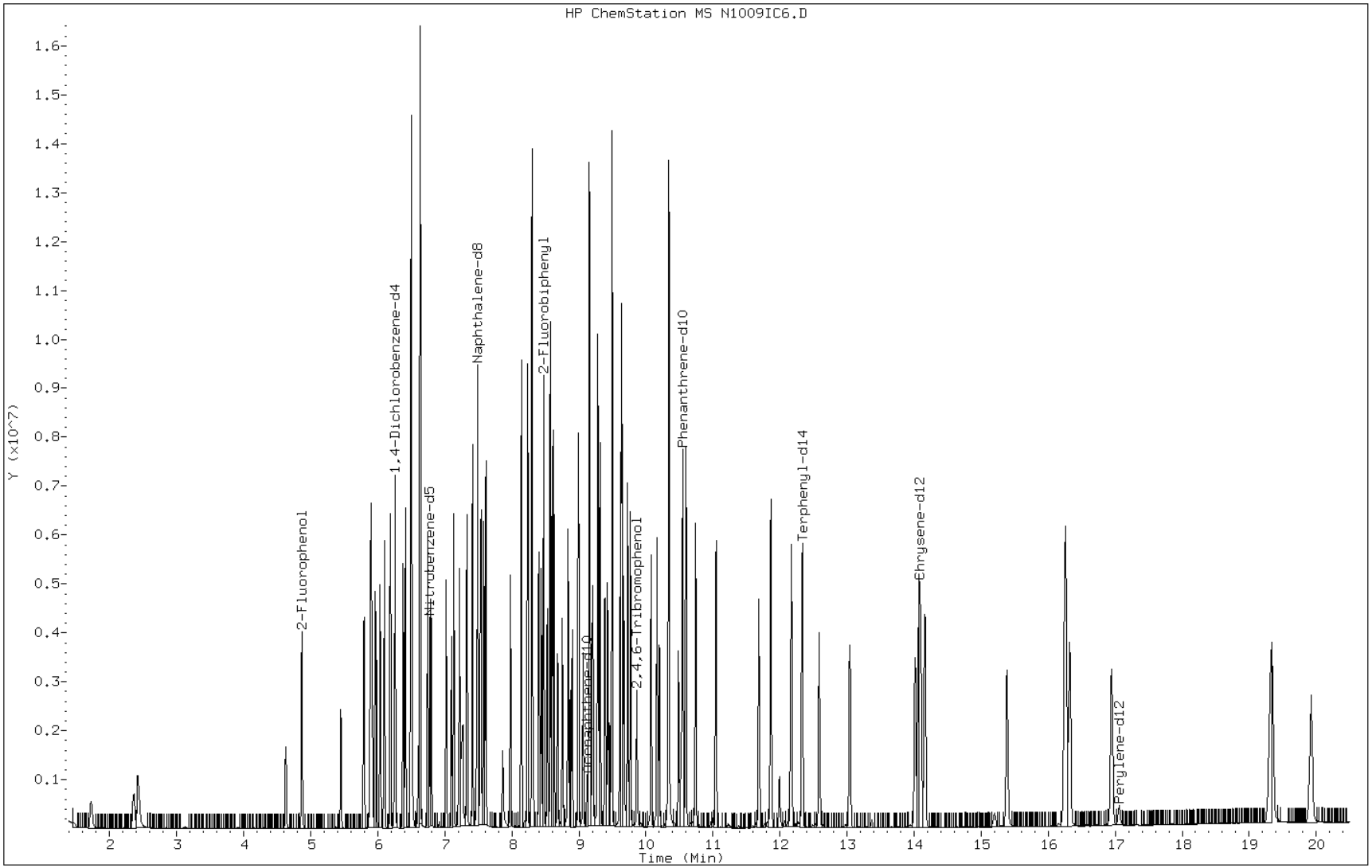
Date: 09-OCT-2013 07:31

Client ID:

Instrument: 733.i

Sample Info: IC 839804

Operator: 3200



Manual Integration Report

Data File: N1009IC6.D
Inj. Date and Time: 09-OCT-2013 07:31
Instrument ID: 733.i
Client ID:
Compound: 49 Benzoic Acid
CAS #: 65-85-0
Report Date: 10/09/2013

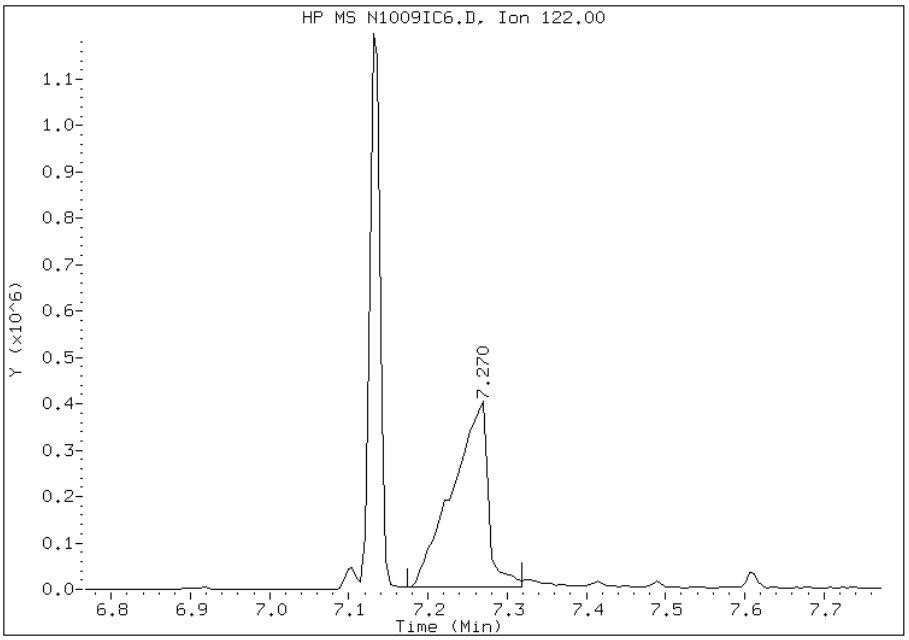
Processing Integration Results

RT: 7.27

Response: 1252716

Amount: 171

Conc: 171



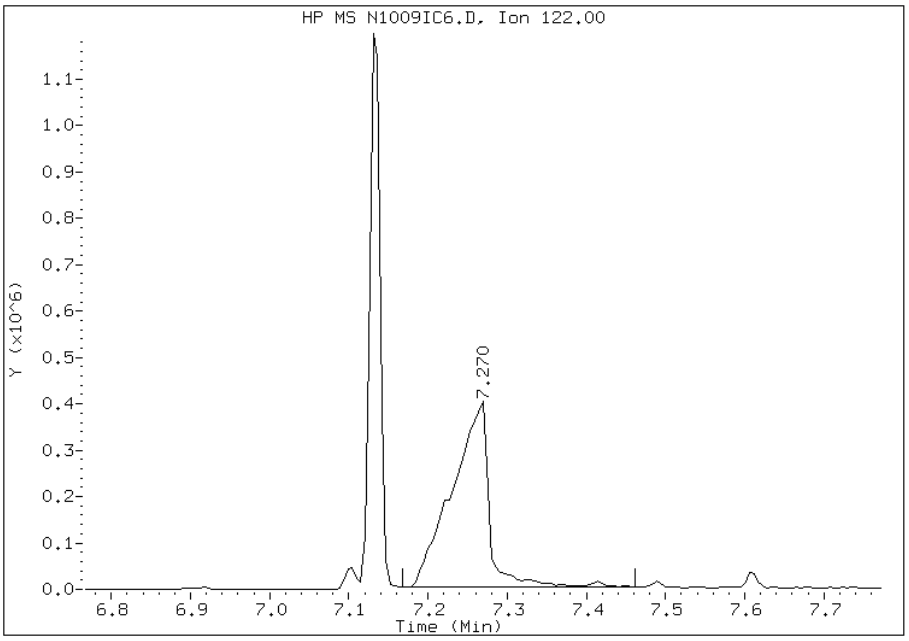
Manual Integration Results

RT: 7.27

Response: 1312703

Amount: 200

Conc: 200



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:39
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC6.D
Inj. Date and Time: 09-OCT-2013 07:31
Instrument ID: 733.i
Client ID:
Compound: 208 Caprolactam
CAS #: 105-60-2
Report Date: 10/09/2013

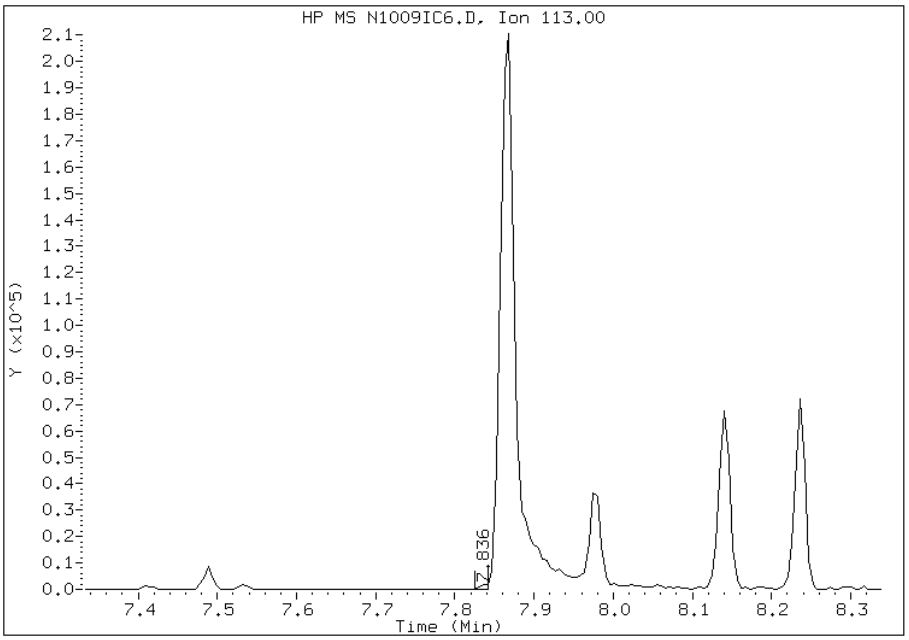
Processing Integration Results

RT: 7.84

Response: 1362

Amount: 0

Conc: 0



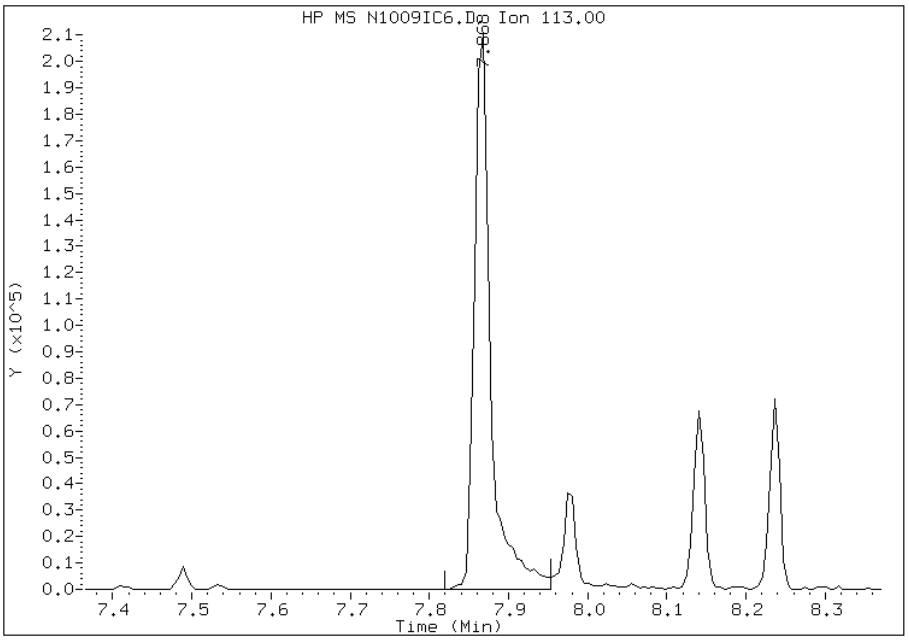
Manual Integration Results

RT: 7.87

Response: 302309

Amount: 72

Conc: 72



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:40
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N1009IC6.D
Inj. Date and Time: 09-OCT-2013 07:31
Instrument ID: 733.i
Client ID:
Compound: 210 Atrazine
CAS #: 1912-24-9
Report Date: 10/09/2013

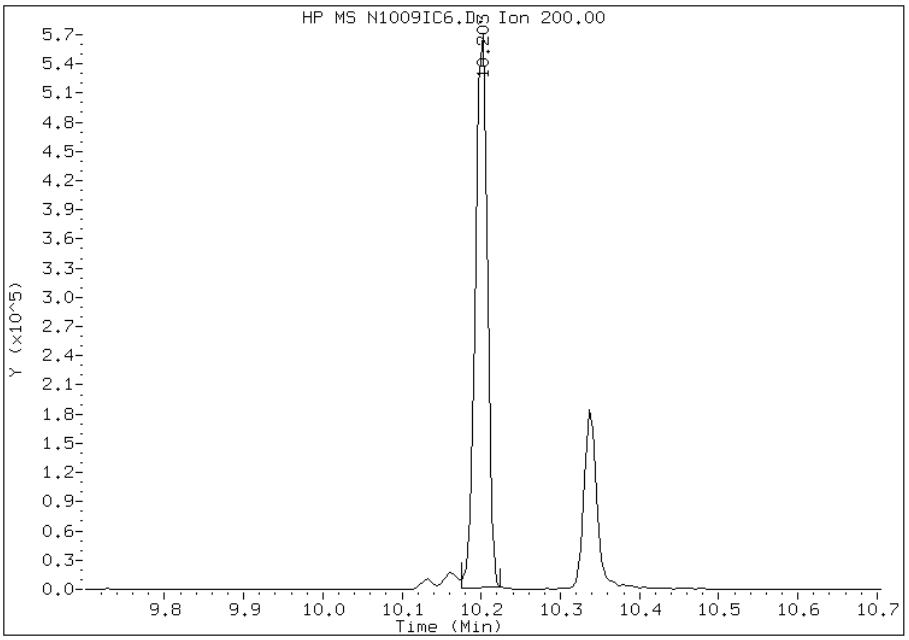
Processing Integration Results

RT: 10.20

Response: 586701

Amount: 47

Conc: 47



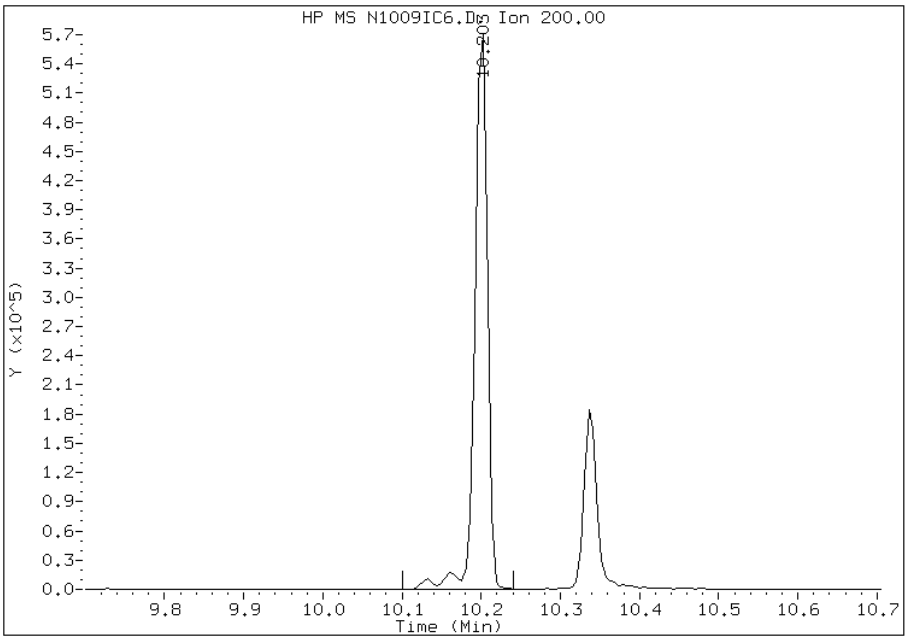
Manual Integration Results

RT: 10.20

Response: 624990

Amount: 54

Conc: 54



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 08:40
Manual Integration Reason: Poor Chromatography

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN100913D.b\N1009IC7.D
Lab Smp Id: IC 839805
Inj Date : 09-OCT-2013 07:56
Operator : 3200 Inst ID: 733.i
Smp Info : IC 839805
Misc Info : TN100913D.b,T8270d.m,tapitt.sub
Comment :
Method : \\PITSVR06\D\chem\733.i\TN100913D.b\T8270d.m
Meth Date : 08-Oct-2013 08:32 piccolinov Quant Type: ISTD
Cal Date : 09-OCT-2013 07:56 Cal File: N1009IC7.D
Als bottle: 8 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: tapitt.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 1	1,4-Dichlorobenzene-d4	152	6.255	6.255	(1.000)	135814	8.00000	
* 2	Naphthalene-d8	136	7.478	7.478	(1.000)	448619	8.00000	
* 3	Acenaphthene-d10	164	9.134	9.134	(1.000)	259727	8.00000	
* 4	Phenanthrene-d10	188	10.534	10.534	(1.000)	388056	8.00000	
* 5	Chrysene-d12	240	14.134	14.134	(1.000)	403598	8.00000	
* 6	Perylene-d12	264	17.083	17.083	(1.000)	323442	8.00000	
198	1,4-Dioxane	88	1.724	1.724	(0.276)	697506	80.0000	78.536
10	N-Nitrosodimethylamine	74	2.365	2.365	(0.378)	920421	80.0000	84.185(M)
9	Pyridine	79	2.430	2.430	(0.388)	1540429	80.0000	82.527
16	Methyl methanesulfonate	80	4.641	4.641	(0.742)	924155	80.0000	72.489
206	Benzaldehyde	77	5.806	5.806	(0.928)	1131307	80.0000	68.243
21	Aniline	93	5.918	5.918	(0.946)	2285273	80.0000	77.086
22	Phenol	94	5.913	5.913	(0.945)	2250413	80.0000	79.636
23	bis(2-Chloroethyl)ether	93	5.987	5.987	(0.957)	1436633	80.0000	80.059
24	2-Chlorophenol	128	6.046	6.046	(0.967)	1816202	80.0000	81.610
226	n-Decane	43	6.105	6.105	(0.976)	1370302	80.0000	81.450
26	1,3-Dichlorobenzene	146	6.196	6.196	(0.991)	2198386	80.0000	82.507
27	1,4-Dichlorobenzene	146	6.271	6.271	(1.003)	2205090	80.0000	80.473
28	1,2-Dichlorobenzene	146	6.420	6.420	(1.026)	2058829	80.0000	80.426
217	Indene	116	6.506	6.506	(1.040)	3280469	80.0000	87.478
29	Benzyl Alcohol	108	6.388	6.388	(1.021)	1032294	80.0000	83.853
30	2-Methylphenol	108	6.506	6.506	(1.040)	1549112	80.0000	83.057
31	2,2'-oxybis(1-Chloropropane)	45	6.522	6.522	(1.043)	1540322	80.0000	78.542
37	Acetophenone	105	6.645	6.645	(1.062)	2371942	80.0000	77.241
32	N-Nitroso-di-n-propylamine	70	6.645	6.645	(1.062)	1133835	80.0000	83.272
192	4-Methylphenol	108	6.645	6.645	(1.062)	1695931	80.0000	87.097
34	Hexachloroethane	117	6.757	6.757	(1.080)	828381	80.0000	80.751
77	1,3-Dinitrobenzene	168	8.883	8.883	(0.973)	543146	80.0000	85.821
35	Nitrobenzene	77	6.805	6.805	(0.910)	1654300	80.0000	81.950

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
36	N-Nitrosopyrrolidine	100	6.618	6.618	(1.058)	661329	80.0000	81.799
41	Isophorone	82	7.035	7.035	(0.941)	2782507	80.0000	86.212
42	2-Nitrophenol	139	7.115	7.115	(0.951)	960736	80.0000	88.002
43	2,4-Dimethylphenol	107	7.141	7.141	(0.955)	1606978	80.0000	91.474
44	bis(2-Chloroethoxy)methane	93	7.227	7.227	(0.966)	1712722	80.0000	85.402
48	2,4-Dichlorophenol	162	7.339	7.339	(0.981)	1542653	80.0000	84.560
49	Benzoic Acid	122	7.286	7.286	(0.974)	1712441	160.000	254.54(M)
50	1,2,4-Trichlorobenzene	180	7.424	7.424	(0.993)	1850179	80.0000	82.866
51	Naphthalene	128	7.499	7.499	(1.003)	5067423	80.0000	85.189
52	4-Chloroaniline	127	7.542	7.542	(1.009)	2021912	80.0000	84.685
54	2,6-Dichlorophenol	162	7.553	7.553	(1.010)	1498152	80.0000	85.253
56	Hexachlorobutadiene	225	7.622	7.622	(1.019)	1239737	80.0000	82.437
208	Caprolactam	113	7.879	7.879	(1.054)	375374	80.0000	93.510
59	4-Chloro-3-Methylphenol	107	7.991	7.991	(1.069)	1362666	80.0000	84.419
62	2-Methylnaphthalene	142	8.151	8.151	(1.090)	3524728	80.0000	85.265
63	1-Methylnaphthalene	142	8.247	8.247	(1.103)	3212198	80.0000	84.818
64	Hexachlorocyclopentadiene	237	8.306	8.306	(0.909)	1551969	80.0000	93.506
65	1,2,4,5-Tetrachlorobenzene	216	8.311	8.311	(0.910)	2033708	80.0000	82.589
66	2,4,6-Trichlorophenol	196	8.413	8.413	(0.921)	1142395	80.0000	84.525
67	2,4,5-Trichlorophenol	196	8.450	8.450	(0.925)	1201212	80.0000	84.086
209	1,1'-Biphenyl	154	8.584	8.584	(0.940)	4141694	80.0000	82.551
70	2-Chloronaphthalene	162	8.610	8.610	(0.943)	3540962	80.0000	82.330
73	2-Nitroaniline	65	8.691	8.691	(0.951)	777078	80.0000	83.430
76	Dimethylphthalate	163	8.851	8.851	(0.969)	3330077	80.0000	79.650
78	2,6-Dinitrotoluene	165	8.910	8.910	(0.975)	771970	80.0000	83.799
79	Acenaphthylene	152	9.006	9.006	(0.986)	5039132	80.0000	84.331
81	3-Nitroaniline	138	9.075	9.075	(0.994)	754864	80.0000	81.714
82	Acenaphthene	153	9.166	9.166	(1.004)	3275152	80.0000	83.405
83	2,4-Dinitrophenol	184	9.171	9.171	(1.004)	1104967	160.000	245.98
85	4-Nitrophenol	109	9.219	9.219	(1.009)	891824	160.000	176.99
86	Dibenzofuran	168	9.326	9.326	(1.021)	4298871	80.0000	79.924
87	2,4-Dinitrotoluene	165	9.294	9.294	(1.018)	1029082	80.0000	87.006
91	2,3,5,6-Tetrachlorophenol	232	9.401	9.401	(1.029)	1055326	80.0000	94.366
88	2,3,4,6-Tetrachlorophenol	232	9.438	9.438	(1.033)	1026246	80.0000	82.939
92	2-Naphthylamine	143	9.471	9.471	(1.037)	779118	80.0000	33.170
93	Diethylphthalate	149	9.508	9.508	(1.041)	3194370	80.0000	81.395
230	n-Hexadecane	57	9.508	9.508	(1.271)	1689045	80.0000	91.274
94	Fluorene	166	9.652	9.652	(1.057)	3565301	80.0000	82.370
95	4-Chlorophenyl-phenylether	204	9.631	9.631	(1.054)	1979739	80.0000	82.298
96	4-Nitroaniline	138	9.652	9.652	(1.057)	752891	80.0000	85.101
98	4,6-Dinitro-2-methylphenol	198	9.684	9.684	(0.919)	1302489	160.000	215.54
99	N-Nitrosodiphenylamine (1)	169	9.738	9.738	(0.924)	2331095	80.0000	88.860
100	1,2-Diphenylhydrazine	77	9.780	9.780	(0.928)	2900939	80.0000	86.523
106	4-Bromophenyl-phenylether	248	10.090	10.090	(0.958)	1087753	80.0000	85.336
107	Hexachlorobenzene	284	10.176	10.176	(0.966)	1035067	80.0000	86.656
210	Atrazine	200	10.213	10.213	(0.970)	626011	80.0000	62.358
227	n-Octadecane	57	10.357	10.357	(1.656)	1618029	80.0000	83.894
111	Pentachlorophenol	266	10.352	10.352	(0.983)	1550334	160.000	223.56
115	Phenanthrene	178	10.560	10.560	(1.003)	4715654	80.0000	87.075
116	Anthracene	178	10.608	10.608	(1.007)	4592910	80.0000	85.505
119	Carbazole	167	10.753	10.753	(1.021)	3905922	80.0000	83.833
120	Di-n-Butylphthalate	149	11.057	11.057	(1.050)	4632338	80.0000	87.883
123	Fluoranthene	202	11.880	11.880	(1.128)	4995600	80.0000	82.834
124	Benzidine	184	12.008	12.008	(0.850)	856804	80.0000	59.711

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
125 Pyrene	202	12.184	12.184	(0.862)	5097924	80.0000	79.590
131 Butylbenzylphthalate	149	13.060	13.060	(0.924)	1923043	80.0000	88.753
135 3,3'-Dichlorobenzidine	252	14.038	14.038	(0.993)	1792581	80.0000	93.871
136 Benzo(a)Anthracene	228	14.113	14.113	(0.998)	4747142	80.0000	81.541
137 Chrysene	228	14.188	14.188	(1.004)	4269911	80.0000	82.054
139 bis(2-ethylhexyl)Phthalate	149	14.081	14.081	(0.996)	2612717	80.0000	94.433
140 Di-n-octylphthalate	149	15.411	15.411	(0.902)	4415951	80.0000	99.029
141 Benzo(b)fluoranthene	252	16.292	16.292	(0.954)	4833360	80.0000	86.166
142 Benzo(k)fluoranthene	252	16.351	16.351	(0.957)	4552825	80.0000	80.796
143 7,12-dimethylbenz[a]anthracen	256	16.276	16.276	(0.953)	2262415	80.0000	96.026
146 Benzo(a)pyrene	252	16.976	16.976	(0.994)	4313607	80.0000	87.188
149 Indeno(1,2,3-cd)pyrene	276	19.353	19.353	(1.133)	4601737	80.0000	90.585
150 Dibenz(a,h)anthracene	278	19.380	19.380	(1.134)	3934621	80.0000	91.677
151 Benzo(g,h,i)perylene	276	19.962	19.962	(1.169)	3834570	80.0000	90.701
$ 154 Nitrobenzene-d5	82	6.789	6.789	(0.908)	1657703	80.0000	82.596
$ 155 2-Fluorobiphenyl	172	8.488	8.488	(0.929)	3978737	80.0000	82.814
$ 156 Terphenyl-d14	244	12.350	12.350	(0.874)	3780133	80.0000	79.246
$ 157 Phenol-d5	99	5.897	5.897	(0.943)	2027651	80.0000	81.894
$ 158 2-Fluorophenol	112	4.876	4.876	(0.780)	1754544	80.0000	83.604
$ 159 2,4,6-Tribromophenol	330	9.877	9.877	(0.938)	386042	80.0000	91.891

QC Flag Legend

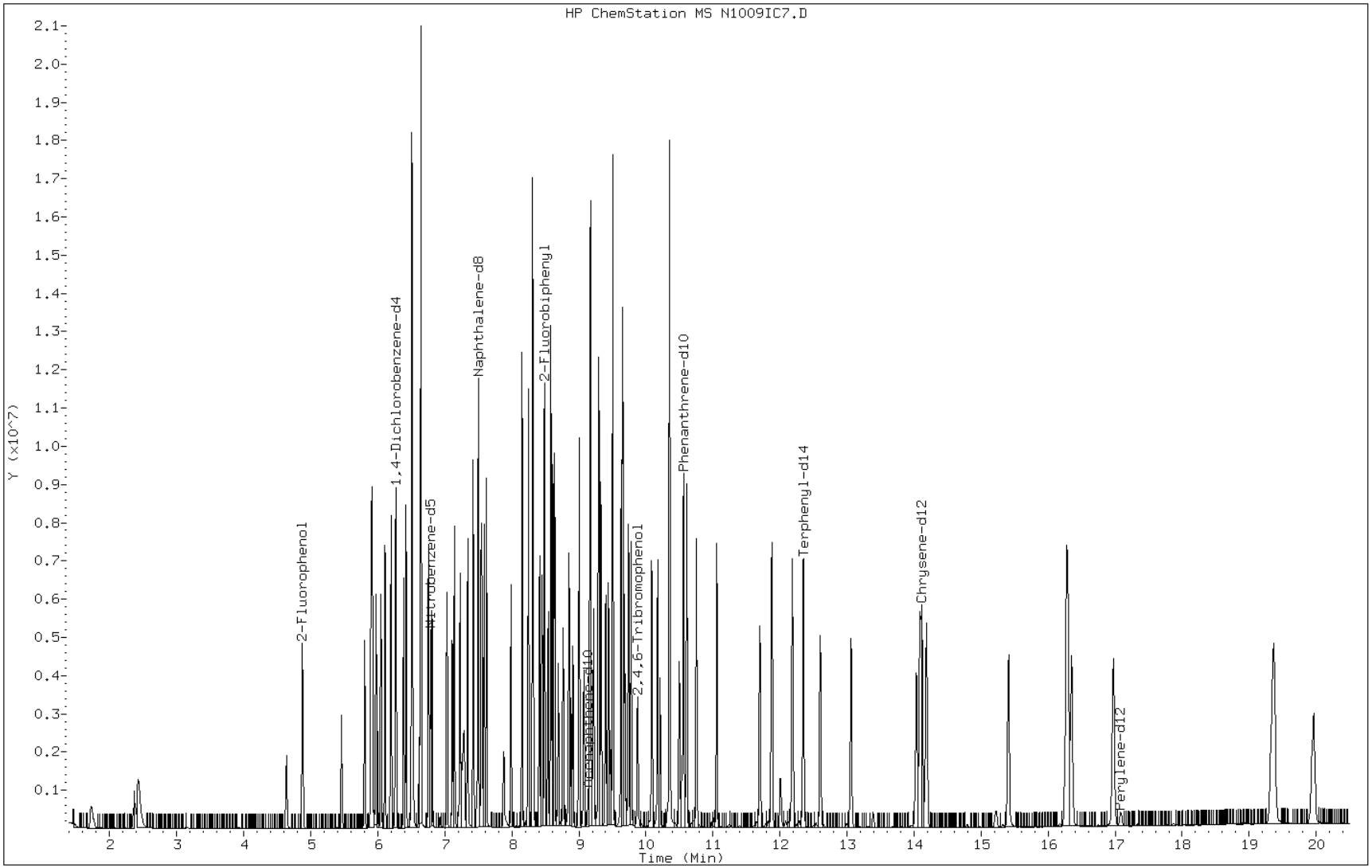
M - Compound response manually integrated.

Data File: N1009IC7.D

Date: 09-OCT-2013 07:56

Client ID: Instrument: 733.i

Sample Info: IC 839805 Operator: 3200



Manual Integration Report

Data File: N1009IC7.D
Inj. Date and Time: 09-OCT-2013 07:56
Instrument ID: 733.i
Client ID:
Compound: 10 N-Nitrosodimethylamine
CAS #: 62-75-9
Report Date: 10/09/2013

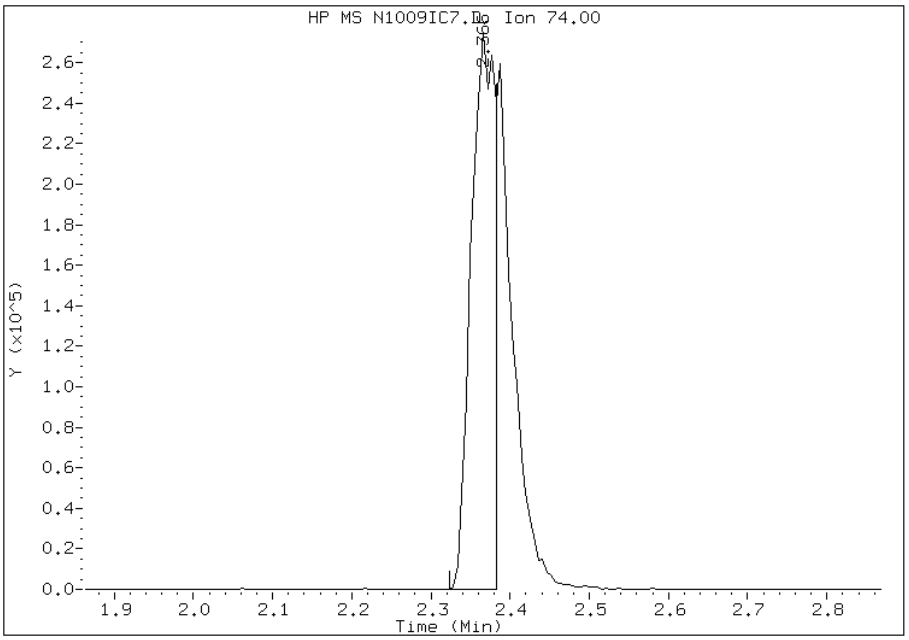
Processing Integration Results

RT: 2.37

Response: 575512

Amount: 52

Conc: 52



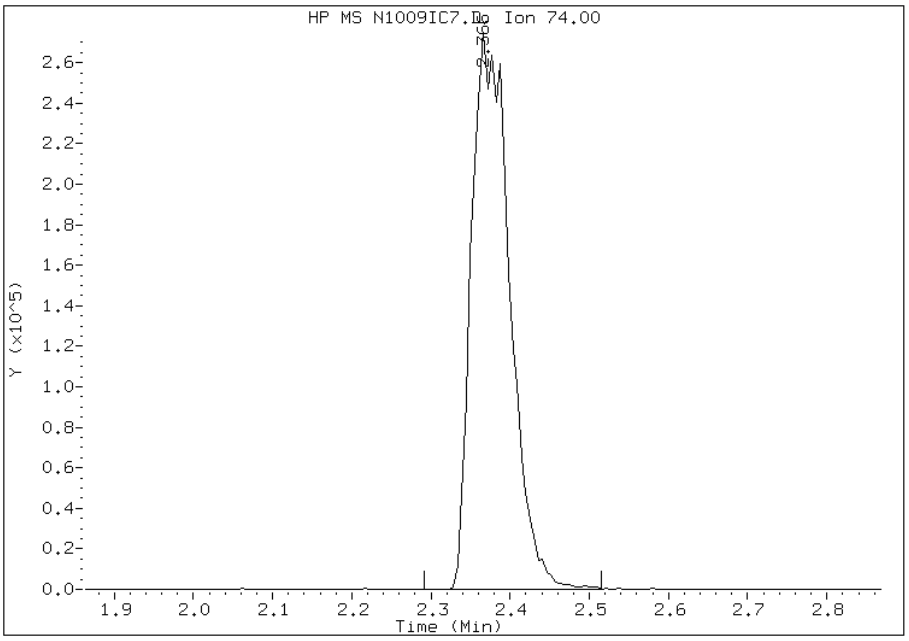
Manual Integration Results

RT: 2.37

Response: 920421

Amount: 84

Conc: 84



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 09:14
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC7.D
Inj. Date and Time: 09-OCT-2013 07:56
Instrument ID: 733.i
Client ID:
Compound: 49 Benzoic Acid
CAS #: 65-85-0
Report Date: 10/09/2013

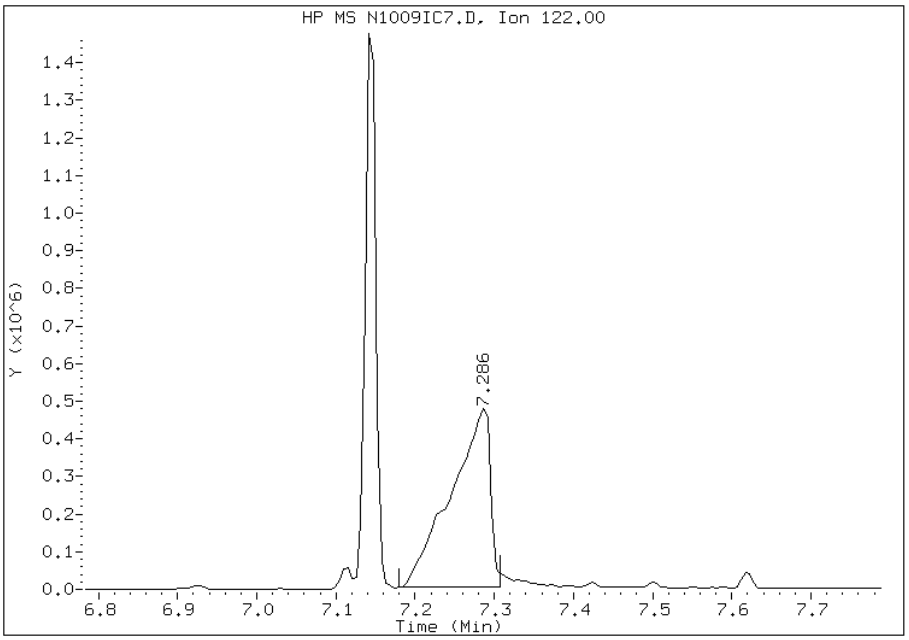
Processing Integration Results

RT: 7.29

Response: 1624902

Amount: 230

Conc: 230



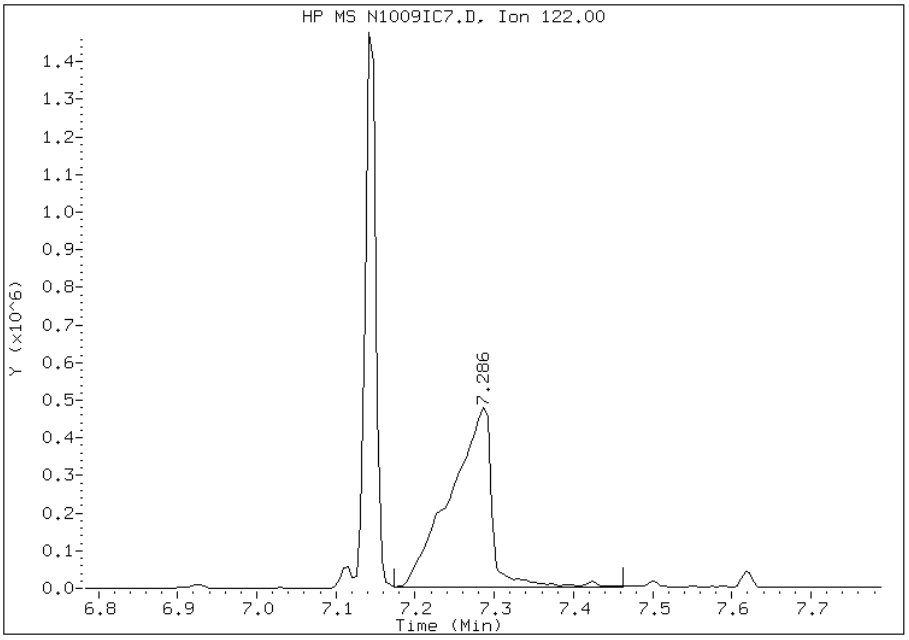
Manual Integration Results

RT: 7.29

Response: 1712441

Amount: 255

Conc: 255



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 09:14
Manual Integration Reason: Poor Chromatography

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN100913D.b\N1009IC8.D
Lab Smp Id: IC 839803
Inj Date : 09-OCT-2013 08:22
Operator : 3200 Inst ID: 733.i
Smp Info : IC 839803
Misc Info : TN100913D.b,T8270d.m,tapitt.sub
Comment :
Method : \\PITSVR06\D\chem\733.i\TN100913D.b\T8270d.m
Meth Date : 08-Oct-2013 08:32 piccolinov Quant Type: ISTD
Cal Date : 09-OCT-2013 08:22 Cal File: N1009IC8.D
Als bottle: 9 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: tapitt.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 1	1,4-Dichlorobenzene-d4	152	6.249	6.249	(1.000)	157931	8.00000	
* 2	Naphthalene-d8	136	7.478	7.478	(1.000)	537258	8.00000	
* 3	Acenaphthene-d10	164	9.134	9.134	(1.000)	299936	8.00000	
* 4	Phenanthrene-d10	188	10.534	10.534	(1.000)	459937	8.00000	
* 5	Chrysene-d12	240	14.134	14.134	(1.000)	448072	8.00000	
* 6	Perylene-d12	264	17.089	17.089	(1.000)	356287	8.00000	
198	1,4-Dioxane	88	1.735	1.735	(0.278)	396633	40.0000	38.597
10	N-Nitrosodimethylamine	74	2.387	2.387	(0.382)	531128	40.0000	41.545(M)
9	Pyridine	79	2.441	2.441	(0.391)	964445	40.0000	43.826
16	Methyl methanesulfonate	80	4.636	4.636	(0.742)	567068	40.0000	38.461
206	Benzaldehyde	77	5.801	5.801	(0.928)	749772	40.0000	39.029
21	Aniline	93	5.918	5.918	(0.947)	1413424	40.0000	40.872
22	Phenol	94	5.908	5.908	(0.945)	1303212	40.0000	39.701
23	bis(2-Chloroethyl)ether	93	5.988	5.988	(0.958)	828057	40.0000	39.722
24	2-Chlorophenol	128	6.041	6.041	(0.967)	1029931	40.0000	39.823
226	n-Decane	43	6.105	6.105	(0.977)	787805	40.0000	40.235
26	1,3-Dichlorobenzene	146	6.196	6.196	(0.991)	1263944	40.0000	40.693
27	1,4-Dichlorobenzene	146	6.265	6.265	(1.003)	1252675	40.0000	39.398
28	1,2-Dichlorobenzene	146	6.420	6.420	(1.027)	1177622	40.0000	39.615
217	Indene	116	6.506	6.506	(1.041)	1799627	40.0000	41.106
29	Benzyl Alcohol	108	6.383	6.383	(1.021)	592566	40.0000	41.214
30	2-Methylphenol	108	6.501	6.501	(1.040)	875705	40.0000	40.329
31	2,2'-oxybis(1-Chloropropane)	45	6.517	6.517	(1.043)	900642	40.0000	39.555
37	Acetophenone	105	6.639	6.639	(1.062)	1349257	40.0000	38.048
32	N-Nitroso-di-n-propylamine	70	6.639	6.639	(1.062)	632335	40.0000	39.944
192	4-Methylphenol	108	6.639	6.639	(1.062)	943575	40.0000	41.456
34	Hexachloroethane	117	6.757	6.757	(1.081)	471538	40.0000	39.587
77	1,3-Dinitrobenzene	168	8.878	8.878	(0.972)	317406	40.0000	42.969
35	Nitrobenzene	77	6.805	6.805	(0.910)	974602	40.0000	40.274

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
36 N-Nitrosopyrrolidine	100	6.613	6.613	(1.058)	386387	40.0000	40.958
41 Isophorone	82	7.029	7.029	(0.940)	1605683	40.0000	41.343
42 2-Nitrophenol	139	7.110	7.110	(0.951)	551093	40.0000	41.870
43 2,4-Dimethylphenol	107	7.142	7.142	(0.955)	899652	40.0000	42.396
44 bis(2-Chloroethoxy)methane	93	7.227	7.227	(0.966)	998627	40.0000	41.375
48 2,4-Dichlorophenol	162	7.334	7.334	(0.981)	887829	40.0000	40.556
49 Benzoic Acid	122	7.259	7.259	(0.971)	967765	80.0000	113.03(M)
50 1,2,4-Trichlorobenzene	180	7.425	7.425	(0.993)	1068727	40.0000	39.973
51 Naphthalene	128	7.500	7.500	(1.003)	2860503	40.0000	40.135
52 4-Chloroaniline	127	7.537	7.537	(1.008)	1149601	40.0000	40.180
54 2,6-Dichlorophenol	162	7.553	7.553	(1.010)	855900	40.0000	40.585
56 Hexachlorobutadiene	225	7.617	7.617	(1.019)	721212	40.0000	40.040
208 Caprolactam	113	7.863	7.863	(1.051)	218612	40.0000	44.709
59 4-Chloro-3-Methylphenol	107	7.986	7.986	(1.068)	773634	40.0000	40.018
62 2-Methylnaphthalene	142	8.151	8.151	(1.090)	2031903	40.0000	40.910
63 1-Methylnaphthalene	142	8.247	8.247	(1.103)	1840064	40.0000	40.498
64 Hexachlorocyclopentadiene	237	8.306	8.306	(0.909)	865191	40.0000	44.426
65 1,2,4,5-Tetrachlorobenzene	216	8.312	8.312	(0.910)	1135207	40.0000	39.930
66 2,4,6-Trichlorophenol	196	8.408	8.408	(0.920)	669838	40.0000	42.529
67 2,4,5-Trichlorophenol	196	8.445	8.445	(0.925)	678568	40.0000	40.987
209 1,1'-Biphenyl	154	8.579	8.579	(0.939)	2308538	40.0000	39.864
70 2-Chloronaphthalene	162	8.611	8.611	(0.943)	1925643	40.0000	38.920
73 2-Nitroaniline	65	8.691	8.691	(0.951)	457844	40.0000	42.228
76 Dimethylphthalate	163	8.846	8.846	(0.968)	1904676	40.0000	39.517
78 2,6-Dinitrotoluene	165	8.904	8.904	(0.975)	443853	40.0000	41.499
79 Acenaphthylene	152	9.001	9.001	(0.985)	2891918	40.0000	41.660
81 3-Nitroaniline	138	9.070	9.070	(0.993)	428052	40.0000	40.109
82 Acenaphthene	153	9.166	9.166	(1.004)	1845466	40.0000	40.608
83 2,4-Dinitrophenol	184	9.166	9.166	(1.004)	598456	80.0000	109.32
85 4-Nitrophenol	109	9.209	9.209	(1.008)	498598	80.0000	84.931
86 Dibenzofuran	168	9.327	9.327	(1.021)	2485182	40.0000	40.009
87 2,4-Dinitrotoluene	165	9.289	9.289	(1.017)	588778	40.0000	42.692
91 2,3,5,6-Tetrachlorophenol	232	9.396	9.396	(1.029)	591875	40.0000	45.010
88 2,3,4,6-Tetrachlorophenol	232	9.439	9.439	(1.033)	580406	40.0000	40.540
92 2-Naphthylamine	143	9.465	9.465	(1.036)	733180	40.0000	28.172
93 Diethylphthalate	149	9.503	9.503	(1.040)	1815485	40.0000	40.051
230 n-Hexadecane	57	9.503	9.503	(1.271)	922745	40.0000	41.426
94 Fluorene	166	9.647	9.647	(1.056)	1986246	40.0000	39.770
95 4-Chlorophenyl-phenylether	204	9.631	9.631	(1.054)	1139046	40.0000	40.874
96 4-Nitroaniline	138	9.647	9.647	(1.056)	429947	40.0000	41.811
98 4,6-Dinitro-2-methylphenol	198	9.674	9.674	(0.918)	715257	80.0000	96.860
99 N-Nitrosodiphenylamine (1)	169	9.733	9.733	(0.924)	1290795	40.0000	41.319
100 1,2-Diphenylhydrazine	77	9.775	9.775	(0.928)	1707731	40.0000	42.578
106 4-Bromophenyl-phenylether	248	10.085	10.085	(0.957)	621835	40.0000	41.011
107 Hexachlorobenzene	284	10.176	10.176	(0.966)	584470	40.0000	41.120
210 Atrazine	200	10.208	10.208	(0.969)	501000	40.0000	41.831
227 n-Octadecane	57	10.352	10.352	(1.656)	906457	40.0000	40.365
111 Pentachlorophenol	266	10.347	10.347	(0.982)	817927	80.0000	96.567
115 Phenanthrene	178	10.555	10.555	(1.002)	2641407	40.0000	41.004
116 Anthracene	178	10.609	10.609	(1.007)	2602298	40.0000	40.763
119 Carbazole	167	10.748	10.748	(1.020)	2219132	40.0000	40.162
120 Di-n-Butylphthalate	149	11.057	11.057	(1.050)	2659029	40.0000	42.224
123 Fluoranthene	202	11.875	11.875	(1.127)	2879095	40.0000	40.244
124 Benzidine	184	12.003	12.003	(0.849)	478591	40.0000	31.007

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
125 Pyrene	202	12.185	12.185	(0.862)	2843375	40.0000	39.987
131 Butylbenzylphthalate	149	13.055	13.055	(0.924)	1037330	40.0000	42.707
135 3,3'-Dichlorobenzidine	252	14.033	14.033	(0.993)	923163	40.0000	43.067
136 Benzo(a)Anthracene	228	14.108	14.108	(0.998)	2543174	40.0000	39.428
137 Chrysene	228	14.183	14.183	(1.003)	2301390	40.0000	39.856
139 bis(2-ethylhexyl)Phthalate	149	14.086	14.086	(0.997)	1387866	40.0000	44.463
140 Di-n-octylphthalate	149	15.406	15.406	(0.902)	2280694	40.0000	45.516
141 Benzo(b)fluoranthene	252	16.282	16.282	(0.953)	2542171	40.0000	40.996
142 Benzo(k)fluoranthene	252	16.341	16.341	(0.956)	2408086	40.0000	38.942
143 7,12-dimethylbenz[a]anthracen	256	16.271	16.271	(0.952)	1141563	40.0000	43.445
146 Benzo(a)pyrene	252	16.966	16.966	(0.993)	2219560	40.0000	40.634
149 Indeno(1,2,3-cd)pyrene	276	19.332	19.332	(1.131)	2328059	40.0000	41.396
150 Dibenz(a,h)anthracene	278	19.364	19.364	(1.133)	1927352	40.0000	40.670
151 Benzo(g,h,i)perylene	276	19.941	19.941	(1.167)	1910738	40.0000	40.898
$ 154 Nitrobenzene-d5	82	6.784	6.784	(0.907)	968923	40.0000	40.273
$ 155 2-Fluorobiphenyl	172	8.482	8.482	(0.929)	2263022	40.0000	40.688
$ 156 Terphenyl-d14	244	12.345	12.345	(0.873)	2138056	40.0000	40.326
$ 157 Phenol-d5	99	5.892	5.892	(0.943)	1178098	40.0000	40.801
$ 158 2-Fluorophenol	112	4.877	4.877	(0.780)	1030963	40.0000	41.951
$ 159 2,4,6-Tribromophenol	330	9.877	9.877	(0.938)	223189	40.0000	44.158

QC Flag Legend

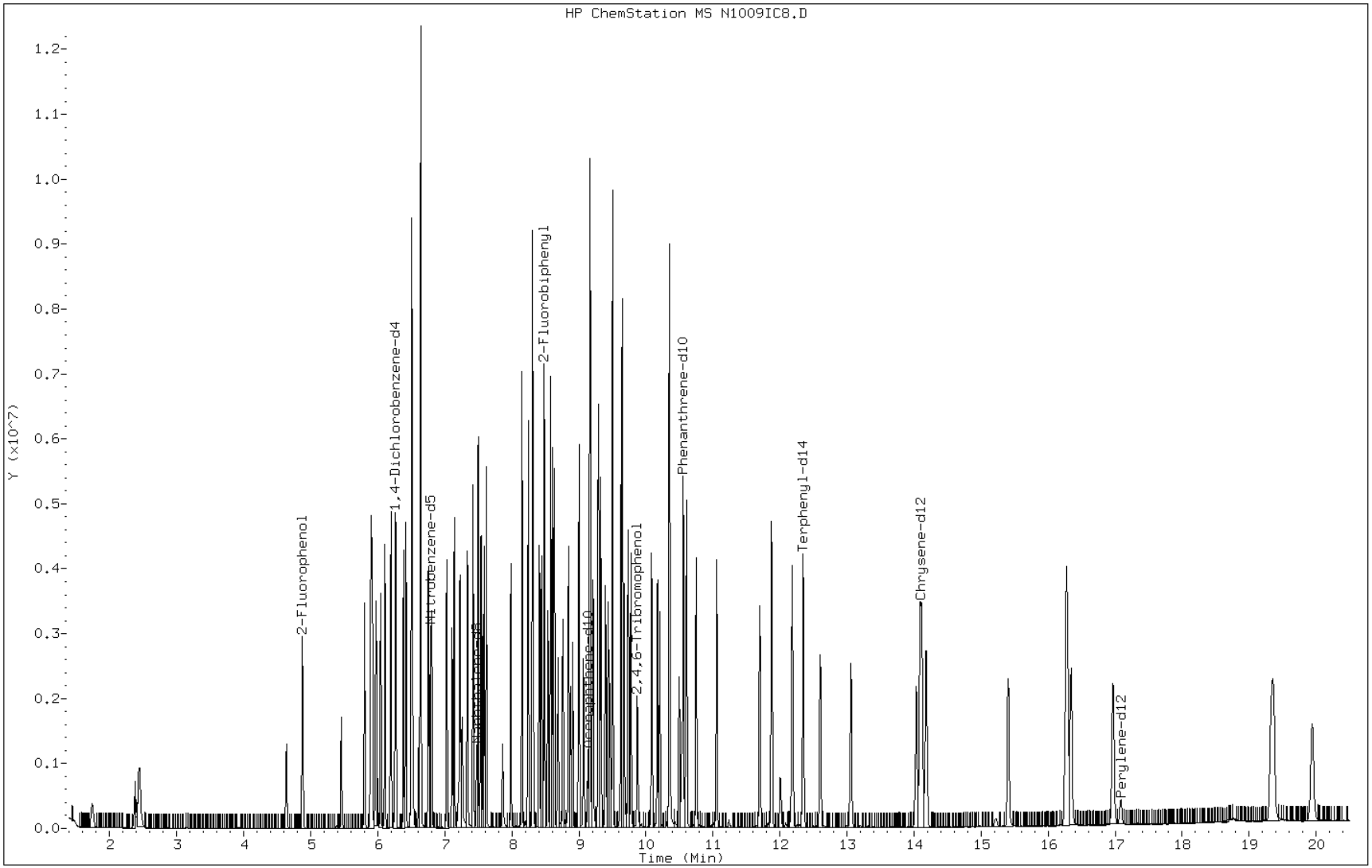
M - Compound response manually integrated.

Data File: N1009IC8.D

Date: 09-OCT-2013 08:22

Client ID: Instrument: 733.i

Sample Info: IC 839803 Operator: 3200



Manual Integration Report

Data File: N1009IC8.D
Inj. Date and Time: 09-OCT-2013 08:22
Instrument ID: 733.i
Client ID:
Compound: 10 N-Nitrosodimethylamine
CAS #: 62-75-9
Report Date: 10/09/2013

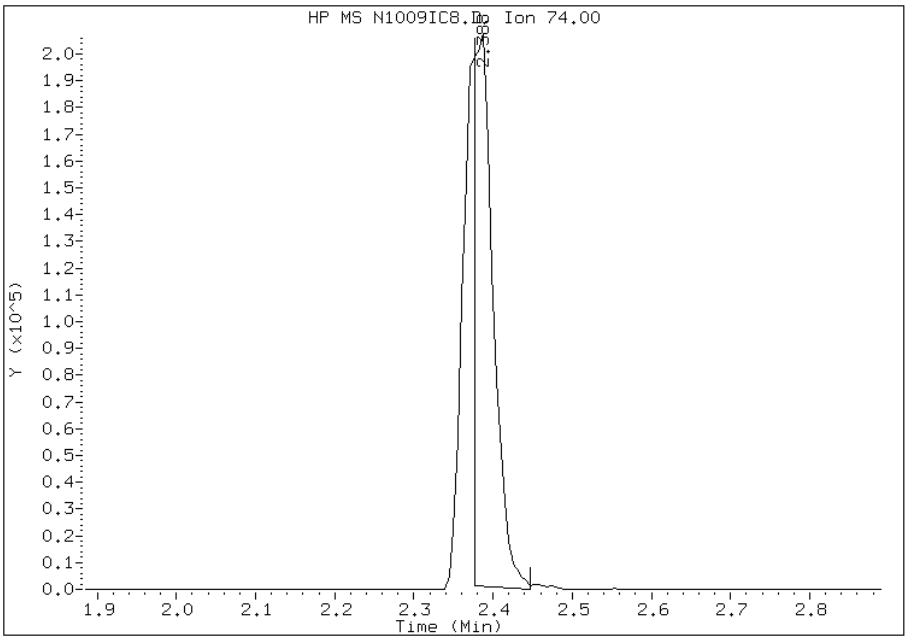
Processing Integration Results

RT: 2.39

Response: 351937

Amount: 30

Conc: 30



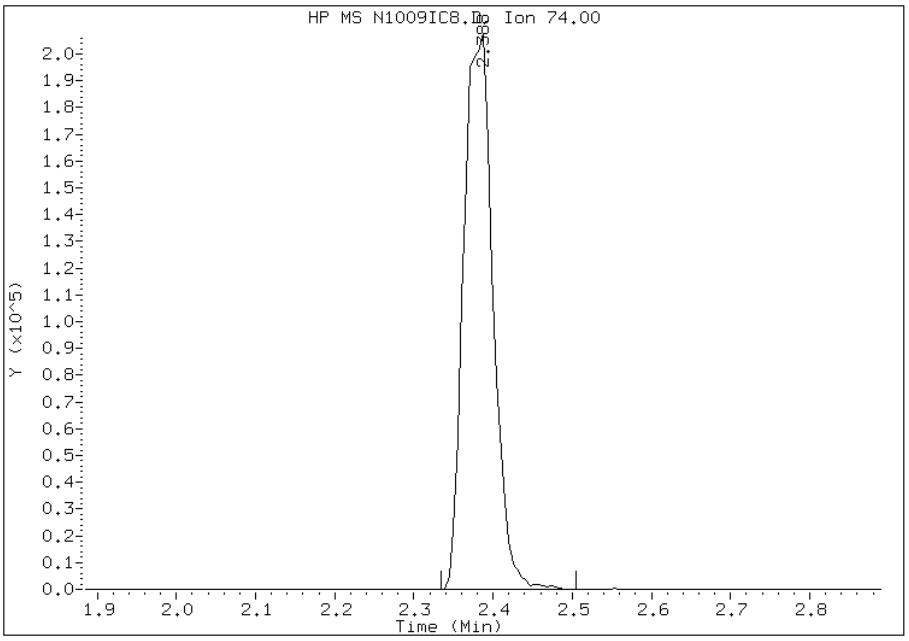
Manual Integration Results

RT: 2.39

Response: 531128

Amount: 42

Conc: 42



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 09:14
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009IC8.D
Inj. Date and Time: 09-OCT-2013 08:22
Instrument ID: 733.i
Client ID:
Compound: 49 Benzoic Acid
CAS #: 65-85-0
Report Date: 10/09/2013

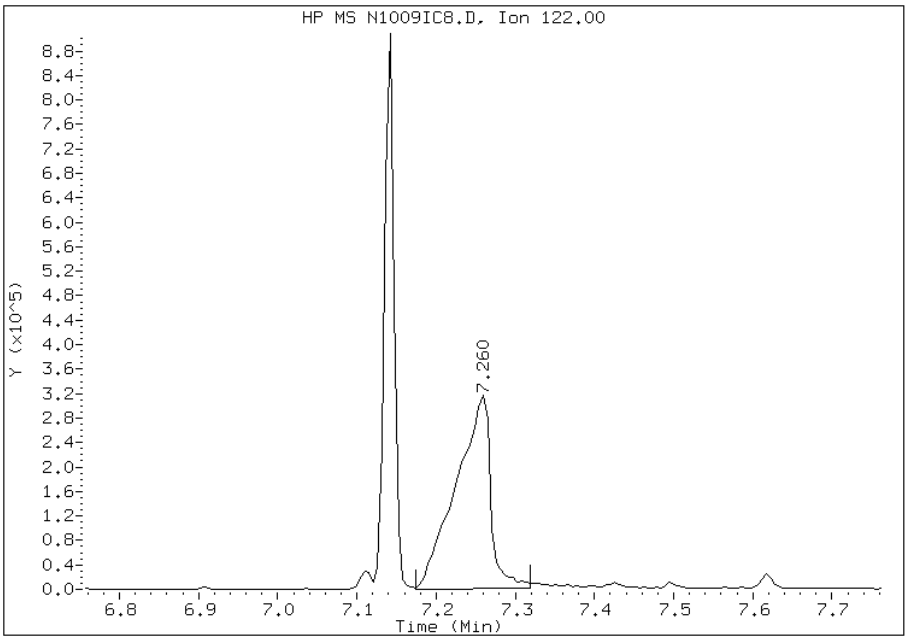
Processing Integration Results

RT: 7.26

Response: 953116

Amount: 112

Conc: 112



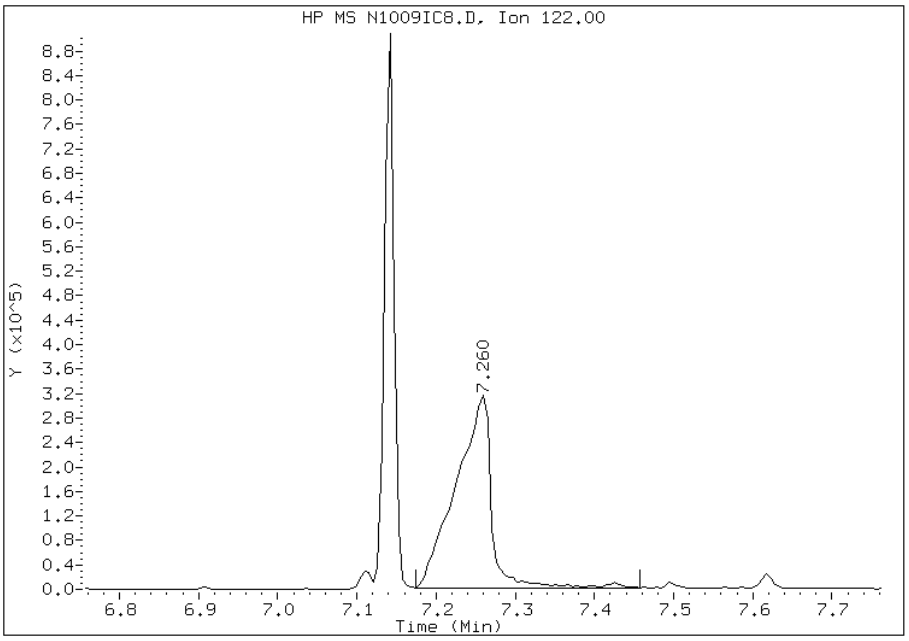
Manual Integration Results

RT: 7.26

Response: 967765

Amount: 113

Conc: 113



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 09:15
Manual Integration Reason: Poor Chromatography

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86218/10 Calibration Date: 10/09/2013 08:47

Instrument ID: 733 Calib Start Date: 10/09/2013 05:24

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 10/09/2013 08:22

Lab File ID: N1009SV1.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5205	0.4981	0.0100	9.57	10.0	-4.3	30.0
N-Nitrosodimethylamine	Ave	0.6476	0.6251	0.0100	9.65	10.0	-3.5	30.0
Pyridine	Ave	1.180	1.184	0.0100	10.0	10.0	0.3	30.0
Benzaldehyde	Ave	0.9731	1.033	0.0100	10.6	10.0	6.2	30.0
Phenol	Ave	1.663	1.602	0.8000	9.63	10.0	-3.7	30.0
Aniline	Ave	1.752	1.622	0.0100	9.26	10.0	-7.4	30.0
Bis(2-chloroethyl)ether	Ave	1.056	1.015	0.7000	9.61	10.0	-3.9	30.0
2-Chlorophenol	Ave	1.310	1.284	0.8000	9.80	10.0	-2.0	30.0
1,3-Dichlorobenzene	Ave	1.573	1.559	0.0100	9.91	10.0	-0.9	30.0
1,4-Dichlorobenzene	Ave	1.611	1.537	0.0100	9.54	10.0	-4.6	30.0
Benzyl alcohol	Ave	0.7283	0.7280	0.0100	10.0	10.0	-0.0	30.0
1,2-Dichlorobenzene	Ave	1.506	1.450	0.0100	9.63	10.0	-3.7	30.0
2-Methylphenol	Ave	1.100	1.030	0.7000	9.36	10.0	-6.4	30.0
Indene	Ave	2.218	2.141	0.0100	9.66	10.0	-3.4	30.0
2,2'-oxybis[1-chloropropane]	Ave	1.153	1.166	0.0100	10.1	10.0	1.1	30.0
Acetophenone	Ave	1.796	1.623	0.0100	9.03	10.0	-9.7	30.0
Methylphenol, 3 & 4	Ave	1.153	1.105	0.6000	9.58	10.0	-4.2	30.0
N-Nitrosodi-n-propylamine	Ave	0.8019	0.7600	0.5000	9.48	10.0	-5.2	30.0
Hexachloroethane	Ave	0.6034	0.5870	0.3000	9.73	10.0	-2.7	30.0
Nitrobenzene	Ave	0.3603	0.3500	0.2000	9.71	10.0	-2.9	30.0
Isophorone	Ave	0.5783	0.5856	0.4000	10.1	10.0	1.3	30.0
2-Nitrophenol	Ave	0.1960	0.1945	0.1000	9.93	10.0	-0.7	30.0
2,4-Dimethylphenol	Ave	0.3160	0.2547	0.2000	8.06	10.0	-19.4	30.0
Benzoic acid	Qua	0.1556	0.1232	0.0100	9.07	10.0	-9.3	30.0
Bis(2-chloroethoxy)methane	Ave	0.3594	0.3362	0.3000	9.36	10.0	-6.4	30.0
2,4-Dichlorophenol	Ave	0.3260	0.3171	0.2000	9.73	10.0	-2.7	30.0
1,2,4-Trichlorobenzene	Ave	0.3981	0.3891	0.0100	9.77	10.0	-2.3	30.0
Naphthalene	Ave	1.061	1.014	0.7000	9.55	10.0	-4.5	30.0
4-Chloroaniline	Ave	0.4260	0.3887	0.0100	9.12	10.0	-8.8	30.0
Hexachlorobutadiene	Ave	0.2682	0.2626	0.0100	9.79	10.0	-2.1	30.0
Caprolactam	Ave	0.0763	0.0739	0.0100		10.0	-3.2	30.0
4-Chloro-3-methylphenol	Ave	0.2879	0.2887	0.2000	10.0	10.0	0.3	30.0
2-Methylnaphthalene	Ave	0.7396	0.6905	0.4000	9.34	10.0	-6.6	30.0
1-Methylnaphthalene	Ave	0.6766	0.6338	0.0100	9.37	10.0	-6.3	30.0
Hexachlorocyclopentadiene	Ave	0.5194	0.5568	0.0500	10.7	10.0	7.2	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.7583	0.7311	0.0100	9.64	10.0	-3.6	30.0
2,4,6-Trichlorophenol	Ave	0.4201	0.4233	0.2000	10.1	10.0	0.8	30.0
2,4,5-Trichlorophenol	Ave	0.4416	0.4411	0.2000	9.99	10.0	-0.1	30.0
1,1'-Biphenyl	Ave	1.545	1.495	0.0100	9.68	10.0	-3.2	30.0
2-Chloronaphthalene	Ave	1.320	1.155	0.8000	8.75	10.0	-12.5	30.0
2-Nitroaniline	Ave	0.2892	0.2962	0.0100	10.2	10.0	2.4	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86218/10 Calibration Date: 10/09/2013 08:47

Instrument ID: 733 Calib Start Date: 10/09/2013 05:24

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 10/09/2013 08:22

Lab File ID: N1009SV1.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dimethyl phthalate	Ave	1.286	1.278	0.0100	9.94	10.0	-0.6	30.0
1,3-Dinitrobenzene	Ave	0.1970	0.1976	0.0100	10.0	10.0	0.3	30.0
2,6-Dinitrotoluene	Ave	0.2853	0.2799	0.2000	9.81	10.0	-1.9	30.0
Acenaphthylene	Ave	1.852	1.846	0.9000	9.97	10.0	-0.3	30.0
3-Nitroaniline	Ave	0.2847	0.2828	0.0100	9.93	10.0	-0.7	30.0
2,4-Dinitrophenol	Qua	0.1794	0.1760	0.0100	18.7	20.0	-6.4	30.0
Acenaphthene	Ave	1.212	1.178	0.9000	9.72	10.0	-2.8	30.0
4-Nitrophenol	Ave	0.1566	0.1687	0.0100	21.5	20.0	7.7	30.0
2,4-Dinitrotoluene	Ave	0.3678	0.3715	0.2000	10.1	10.0	1.0	30.0
Dibenzofuran	Ave	1.657	1.583	0.8000	9.56	10.0	-4.4	30.0
2,3,4,6-Tetrachlorophenol	Ave	0.3819	0.3538	0.0100	9.27	10.0	-7.3	30.0
Diethyl phthalate	Ave	1.209	1.212	0.0100	10.0	10.0	0.3	30.0
4-Chlorophenyl phenyl ether	Ave	0.7433	0.7192	0.4000	9.68	10.0	-3.2	30.0
4-Nitroaniline	Ave	0.2743	0.2740	0.0100	9.99	10.0	-0.1	30.0
Fluorene	Ave	1.332	1.302	0.9000	9.78	10.0	-2.2	30.0
4,6-Dinitro-2-methylphenol	Qua	0.1475	0.1478	0.0100	20.2	20.0	1.0	30.0
N-Nitrosodiphenylamine	Ave	0.5434	0.5485	0.0100	10.1	10.0	1.0	30.0
4-Bromophenyl phenyl ether	Ave	0.2637	0.2531	0.1000	9.60	10.0	-4.0	30.0
Hexachlorobenzene	Ave	0.2472	0.2320	0.1000	9.38	10.0	-6.2	30.0
Atrazine	Ave	0.2083	0.2173	0.0100	10.4	10.0	4.3	30.0
Pentachlorophenol	Qua	0.1473	0.1572	0.0500	19.2	20.0	-3.8	30.0
Phenanthrene	Ave	1.120	1.059	0.7000	9.45	10.0	-5.5	30.0
Anthracene	Ave	1.110	1.073	0.7000	9.67	10.0	-3.3	30.0
Carbazole	Ave	0.9611	0.9222	0.0100	9.60	10.0	-4.0	30.0
Di-n-butyl phthalate	Ave	1.095	1.117	0.0100	10.2	10.0	2.0	30.0
Fluoranthene	Ave	1.244	1.247	0.6000	10.0	10.0	0.2	30.0
Benzidine	Qua	0.2846	0.2338	0.0100		10.0	-19.2	30.0
Pyrene	Ave	1.270	1.256	0.6000	9.89	10.0	-1.1	30.0
Butyl benzyl phthalate	Ave	0.4337	0.4641	0.0100	10.7	10.0	7.0	30.0
3,3'-Dichlorobenzidine	Ave	0.3827	0.4119	0.0100	10.8	10.0	7.6	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.5761	0.6134	0.0100		10.0	6.5	30.0
Benzo[a]anthracene	Ave	1.152	1.117	0.8000	9.70	10.0	-3.0	30.0
Chrysene	Ave	1.031	1.048	0.7000	10.2	10.0	1.6	30.0
Di-n-octyl phthalate	Qua	1.125	1.238	0.0100	10.2	10.0	1.7	30.0
Benzo[b]fluoranthene	Ave	1.392	1.337	0.7000	9.60	10.0	-4.0	30.0
Benzo[k]fluoranthene	Ave	1.389	1.389	0.7000	10.0	10.0	0.0	30.0
Benzo[a]pyrene	Ave	1.226	1.212	0.7000	9.88	10.0	-1.2	30.0
Indeno[1,2,3-cd]pyrene	Ave	1.263	1.183	0.5000	9.37	10.0	-6.3	30.0
Dibenz(a,h)anthracene	Ave	1.064	1.047	0.4000	9.84	10.0	-1.6	30.0
Benzo[g,h,i]perylene	Ave	1.049	1.029	0.5000	9.81	10.0	-1.9	30.0
2-Fluorophenol (Surr)	Ave	1.245	1.204		9.67	10.0	-3.3	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86218/10 Calibration Date: 10/09/2013 08:47

Instrument ID: 733 Calib Start Date: 10/09/2013 05:24

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 10/09/2013 08:22

Lab File ID: N1009SV1.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Phenol-d5 (Surr)	Ave	1.463	1.405		9.61	10.0	-3.9	30.0
Nitrobenzene-d5 (Surr)	Ave	0.3582	0.3467		9.68	10.0	-3.2	30.0
2-Fluorobiphenyl	Ave	1.483	1.432		9.65	10.0	-3.5	30.0
2,4,6-Tribromophenol (Surr)	Ave	0.0879	0.0851	0.0100	9.68	10.0	-3.2	30.0
Terphenyl-d14 (Surr)	Ave	0.9466	0.9219		9.74	10.0	-2.6	30.0

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN100913D.b\N1009SV1.D
Lab Smp Id: ICV 840220
Inj Date : 09-OCT-2013 08:47
Operator : 3200 Inst ID: 733.i
Smp Info : ICV 840220
Misc Info : TN100913D.b,T8270d.m,tasv1.sub
Comment :
Method : \\PITSVR06\D\chem\733.i\TN100913D.b\T8270d.m
Meth Date : 09-Oct-2013 14:14 piccolinov Quant Type: ISTD
Cal Date : 09-OCT-2013 08:22 Cal File: N1009IC8.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: tasv1.sub
Target Version: 4.14
Processing Host: PITPC-502

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
* 1	1,4-Dichlorobenzene-d4	152	6.251	6.249	(1.000)	164615	8.00000	
* 2	Naphthalene-d8	136	7.475	7.478	(1.000)	561006	8.00000	
* 3	Acenaphthene-d10	164	9.131	9.134	(1.000)	314870	8.00000	
* 4	Phenanthrene-d10	188	10.530	10.534	(1.000)	509056	8.00000	
* 5	Chrysene-d12	240	14.131	14.134	(1.000)	495383	8.00000	
* 6	Perylene-d12	264	17.085	17.089	(1.000)	377355	8.00000	
198	1,4-Dioxane	88	1.748	1.736	(0.280)	204978	19.1370	19.137
10	N-Nitrosodimethylamine	74	2.389	2.388	(0.382)	257256	19.3057	19.306
9	Pyridine	79	2.448	2.441	(0.392)	487207	20.0627	20.063
206	Benzaldehyde	77	5.802	5.801	(0.928)	425268	21.2382	21.238
21	Aniline	93	5.915	5.919	(0.946)	667378	18.5152	18.515
22	Phenol	94	5.904	5.908	(0.944)	659139	19.2648	19.265
23	bis(2-Chloroethyl)ether	93	5.984	5.988	(0.957)	417748	19.2258	19.226
24	2-Chlorophenol	128	6.043	6.042	(0.967)	528323	19.5987	19.599
226	n-Decane	43	6.107	6.106	(0.977)	393152	19.2641	19.264
26	1,3-Dichlorobenzene	146	6.192	6.197	(0.991)	641517	19.8150	19.815
27	1,4-Dichlorobenzene	146	6.267	6.266	(1.003)	632337	19.0802	19.080
28	1,2-Dichlorobenzene	146	6.417	6.421	(1.026)	596862	19.2630	19.263
217	Indene	116	6.502	6.506	(1.040)	881228	19.3111	19.311
29	Benzyl Alcohol	108	6.379	6.384	(1.021)	299587	19.9906	19.990
30	2-Methylphenol	108	6.492	6.501	(1.038)	423905	18.7296	18.730
31	2,2'-oxybis(1-Chloropropane)	45	6.513	6.517	(1.042)	480013	20.2258	20.226(M)
37	Acetophenone	105	6.636	6.640	(1.062)	667864	18.0685	18.068
32	N-Nitroso-di-n-propylamine	70	6.636	6.640	(1.062)	312757	18.9546	18.955
192	4-Methylphenol	108	6.636	6.640	(1.062)	454785	19.1695	19.170
34	Hexachloroethane	117	6.753	6.757	(1.080)	241562	19.4563	19.456
77	1,3-Dinitrobenzene	168	8.874	8.878	(0.972)	155548	20.0585	20.058
35	Nitrobenzene	77	6.801	6.806	(0.910)	490808	19.4237	19.424

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
41	Isophorone	82	7.026	7.030	(0.940)	821333	20.2523	20.252
42	2-Nitrophenol	139	7.111	7.110	(0.951)	272846	19.8521	19.852
43	2,4-Dimethylphenol	107	7.138	7.142	(0.955)	357249	16.1226	16.123(M)
44	bis(2-Chloroethoxy)methane	93	7.224	7.228	(0.966)	471566	18.7110	18.711
48	2,4-Dichlorophenol	162	7.336	7.334	(0.981)	444732	19.4555	19.455
49	Benzoic Acid	122	7.207	7.260	(0.964)	172768	18.1381	18.138(M)
50	1,2,4-Trichlorobenzene	180	7.421	7.425	(0.993)	545744	19.5482	19.548
51	Naphthalene	128	7.496	7.500	(1.003)	1422106	19.1086	19.109
52	4-Chloroaniline	127	7.533	7.537	(1.008)	545086	18.2449	18.245
56	Hexachlorobutadiene	225	7.619	7.618	(1.019)	368227	19.5775	19.578
208	Caprolactam	113	7.838	7.863	(1.049)	103611	19.3628	19.363
59	4-Chloro-3-Methylphenol	107	7.982	7.986	(1.068)	404872	20.0562	20.056
62	2-Methylnaphthalene	142	8.148	8.151	(1.090)	968416	18.6726	18.672
63	1-Methylnaphthalene	142	8.244	8.247	(1.103)	888947	18.7369	18.737
64	Hexachlorocyclopentadiene	237	8.303	8.307	(0.909)	438290	21.4379	21.438
65	1,2,4,5-Tetrachlorobenzene	216	8.308	8.311	(0.910)	575515	19.2834	19.283
66	2,4,6-Trichlorophenol	196	8.409	8.407	(0.921)	333195	20.1518	20.152
67	2,4,5-Trichlorophenol	196	8.442	8.446	(0.925)	347215	19.9780	19.978
209	1,1'-Biphenyl	154	8.575	8.579	(0.939)	1177180	19.3636	19.364
70	2-Chloronaphthalene	162	8.607	8.611	(0.943)	909379	17.5082	17.508
73	2-Nitroaniline	65	8.687	8.691	(0.951)	233179	20.4864	20.486
76	Dimethylphthalate	163	8.842	8.846	(0.968)	1006125	19.8845	19.884
78	2,6-Dinitrotoluene	165	8.901	8.905	(0.975)	220305	19.6209	19.621
79	Acenaphthylene	152	9.002	9.001	(0.986)	1453183	19.9413	19.941
81	3-Nitroaniline	138	9.067	9.071	(0.993)	222577	19.8666	19.867
82	Acenaphthene	153	9.163	9.167	(1.004)	927103	19.4327	19.433
83	2,4-Dinitrophenol	184	9.163	9.167	(1.004)	277047	37.4377	37.438(M)
85	4-Nitrophenol	109	9.205	9.209	(1.008)	265553	43.0886	43.089
86	Dibenzofuran	168	9.323	9.327	(1.021)	1246338	19.1130	19.113
87	2,4-Dinitrotoluene	165	9.286	9.290	(1.017)	292398	20.1959	20.196
88	2,3,4,6-Tetrachlorophenol	232	9.435	9.439	(1.033)	278511	18.5308	18.531
93	Diethylphthalate	149	9.499	9.503	(1.040)	954416	20.0567	20.057
230	n-Hexadecane	57	9.505	9.503	(1.272)	456634	19.6322	19.632
94	Fluorene	166	9.643	9.648	(1.056)	1025100	19.5517	19.552
95	4-Chlorophenyl-phenylether	204	9.627	9.632	(1.054)	566102	19.3509	19.351
96	4-Nitroaniline	138	9.638	9.648	(1.056)	215689	19.9802	19.980
98	4,6-Dinitro-2-methylphenol	198	9.670	9.674	(0.918)	376191	40.3965	40.396(M)
99	N-Nitrosodiphenylamine (1)	169	9.734	9.733	(0.924)	698089	20.1899	20.190
100	1,2-Diphenylhydrazine	77	9.777	9.776	(0.928)	889088	20.0285	20.028
106	4-Bromophenyl-phenylether	248	10.087	10.086	(0.958)	322103	19.1935	19.194
107	Hexachlorobenzene	284	10.172	10.176	(0.966)	295255	18.7680	18.768
210	Atrazine	200	10.204	10.208	(0.969)	276579	20.8646	20.865
227	n-Octadecane	57	10.354	10.353	(1.656)	453797	19.3873	19.387
111	Pentachlorophenol	266	10.343	10.347	(0.982)	400052	38.4705	38.470(M)
115	Phenanthrene	178	10.552	10.556	(1.002)	1347850	18.9044	18.904
116	Anthracene	178	10.605	10.609	(1.007)	1365973	19.3325	19.332
119	Carbazole	167	10.749	10.748	(1.021)	1173659	19.1915	19.192
120	Di-n-Butylphthalate	149	11.054	11.058	(1.050)	1421715	20.3978	20.398
123	Fluoranthene	202	11.877	11.875	(1.128)	1587416	20.0477	20.048
124	Benzidine	184	12.005	12.003	(0.850)	289530	16.1545	16.154(M)
125	Pyrene	202	12.181	12.185	(0.862)	1555554	19.7869	19.787
131	Butylbenzylphthalate	149	13.062	13.056	(0.924)	574754	21.4026	21.403
135	3,3'-Dichlorobenzidine	252	14.035	14.033	(0.993)	510168	21.5273	21.527
136	Benzo(a)Anthracene	228	14.110	14.108	(0.998)	1383080	19.3947	19.395

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
137 Chrysene	228	14.179	14.183	(1.003)	1297722	20.3280	20.328
139 bis(2-ethylhexyl)Phthalate	149	14.088	14.087	(0.997)	759647	21.2939	21.294
140 Di-n-octylphthalate	149	15.408	15.406	(0.902)	1167594	20.3371	20.337
141 Benzo(b)fluoranthene	252	16.278	16.282	(0.953)	1261621	19.2095	19.209
142 Benzo(k)fluoranthene	252	16.337	16.341	(0.956)	1310522	20.0095	20.010
146 Benzo(a)pyrene	252	16.968	16.966	(0.993)	1143264	19.7617	19.762
149 Indeno(1,2,3-cd)pyrene	276	19.334	19.333	(1.132)	1116315	18.7412	18.741
150 Dibenz(a,h)anthracene	278	19.361	19.365	(1.133)	987630	19.6770	19.677
151 Benzo(g,h,i)perylene	276	19.938	19.942	(1.167)	970925	19.6216	19.622
$ 154 Nitrobenzene-d5	82	6.780	6.784	(0.907)	486272	19.3562	19.356
$ 155 2-Fluorobiphenyl	172	8.484	8.483	(0.929)	1126846	19.2993	19.299
$ 156 Terphenyl-d14	244	12.347	12.345	(0.874)	1141779	19.4784	19.478
$ 157 Phenol-d5	99	5.888	5.892	(0.942)	578386	19.2179	19.218
$ 158 2-Fluorophenol	112	4.873	4.877	(0.780)	495563	19.3463	19.346
$ 159 2,4,6-Tribromophenol	330	9.873	9.877	(0.938)	108309	19.3614	19.361

QC Flag Legend

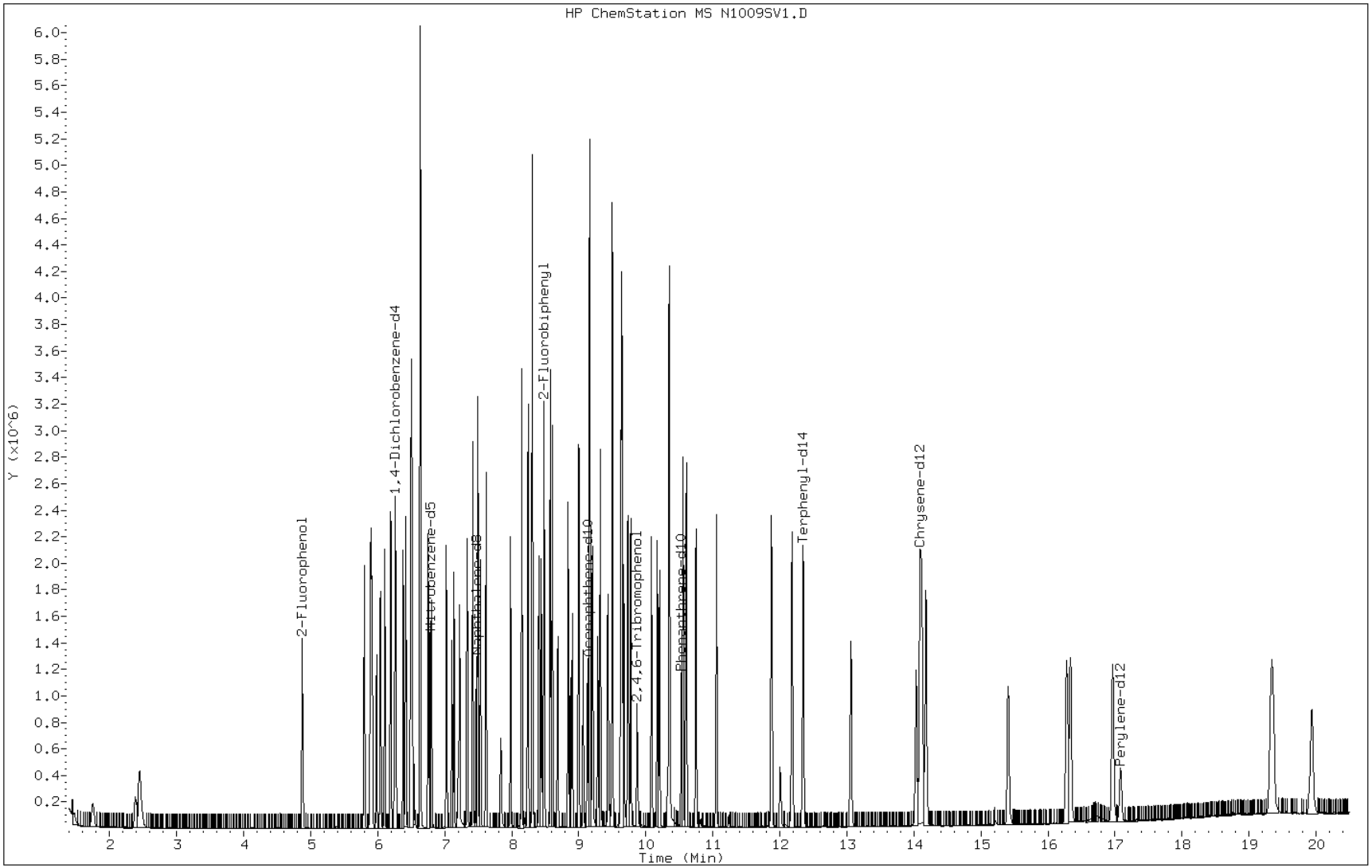
M - Compound response manually integrated.

Data File: N1009SV1.D

Date: 09-OCT-2013 08:47

Client ID: Instrument: 733.i

Sample Info: ICV 840220 Operator: 3200



Manual Integration Report

Data File: N1009SV1.D
Inj. Date and Time: 09-OCT-2013 08:47
Instrument ID: 733.i
Client ID:
Compound: 31 2,2'-oxybis(1-Chloropropane)
CAS #: 108-60-1
Report Date: 10/09/2013

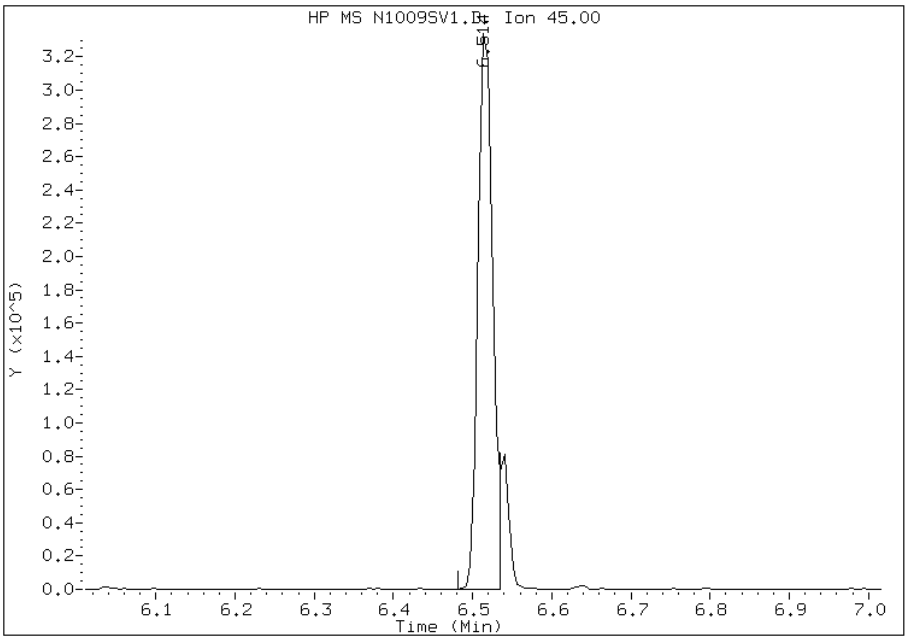
Processing Integration Results

RT: 6.51

Response: 432656

Amount: 18

Conc: 18



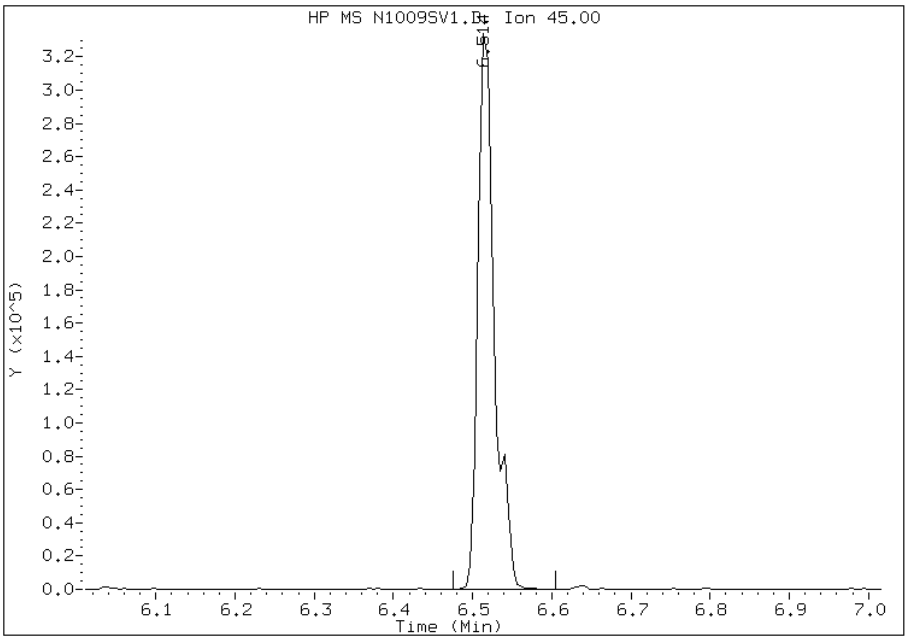
Manual Integration Results

RT: 6.51

Response: 480013

Amount: 20

Conc: 20



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 09:38
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009SV1.D
Inj. Date and Time: 09-OCT-2013 08:47
Instrument ID: 733.i
Client ID:
Compound: 43 2,4-Dimethylphenol
CAS #: 105-67-9
Report Date: 10/09/2013

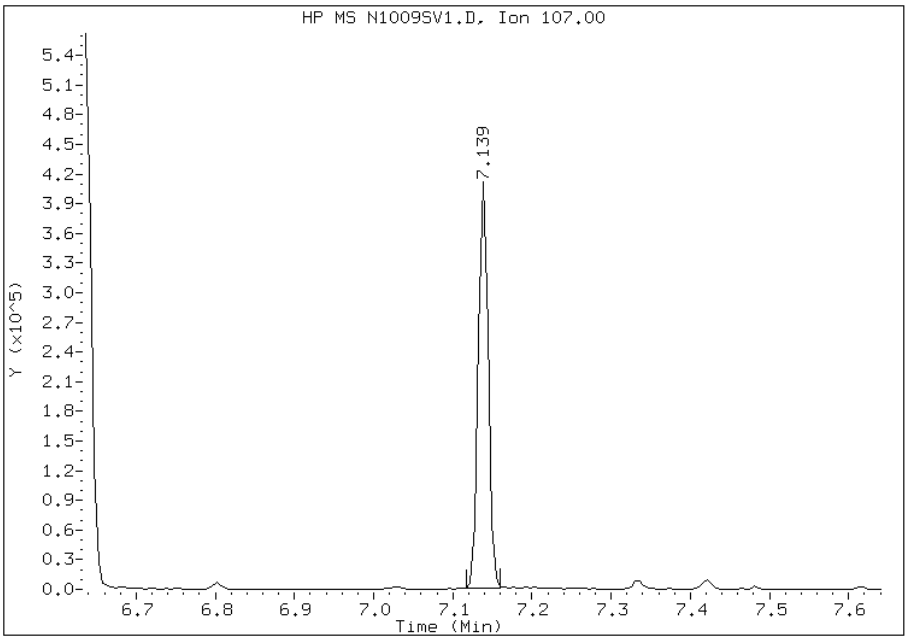
Processing Integration Results

RT: 7.14

Response: 346475

Amount: 16

Conc: 16



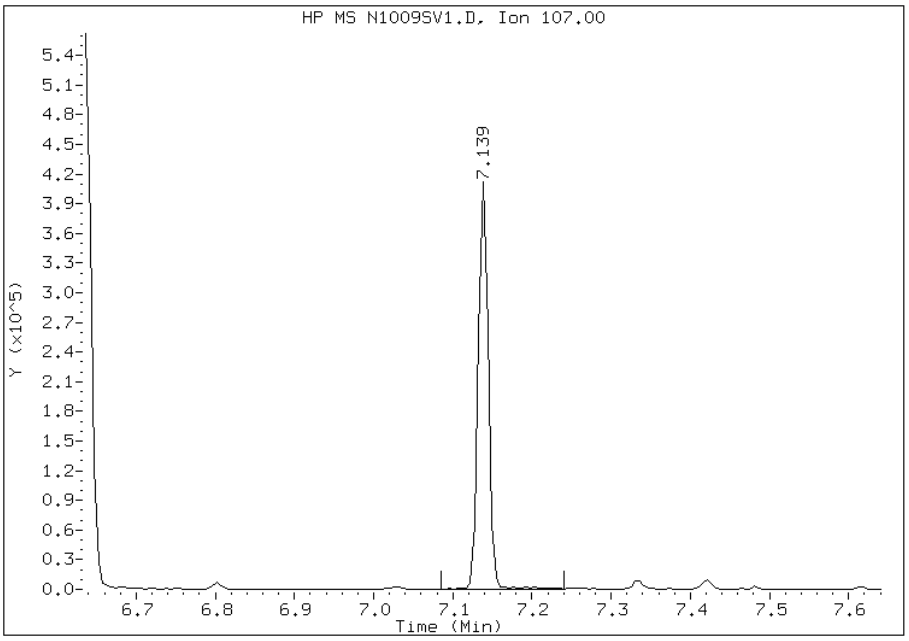
Manual Integration Results

RT: 7.14

Response: 357249

Amount: 16

Conc: 16



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 09:39
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009SV1.D
Inj. Date and Time: 09-OCT-2013 08:47
Instrument ID: 733.i
Client ID:
Compound: 49 Benzoic Acid
CAS #: 65-85-0
Report Date: 10/09/2013

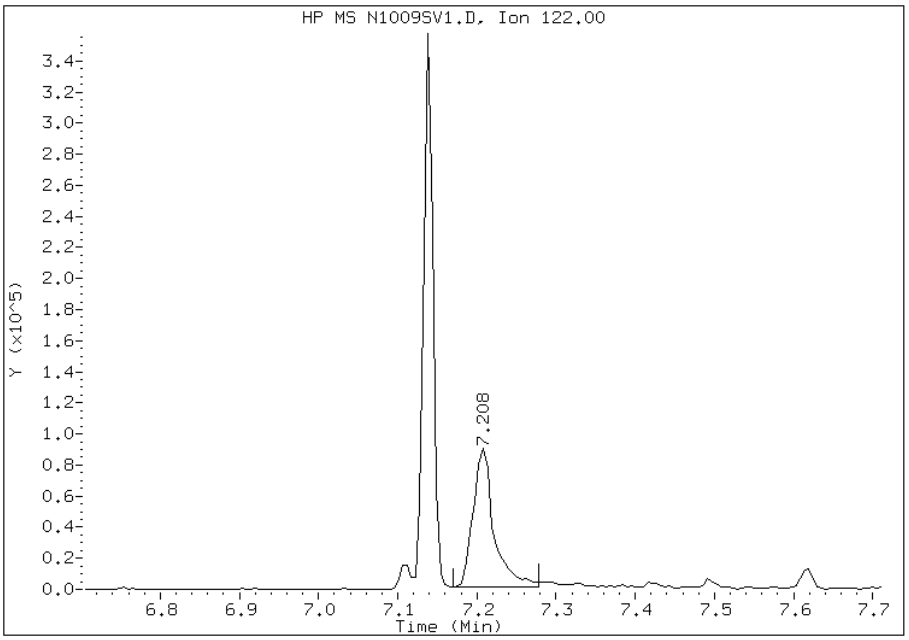
Processing Integration Results

RT: 7.21

Response: 162177

Amount: 17

Conc: 17



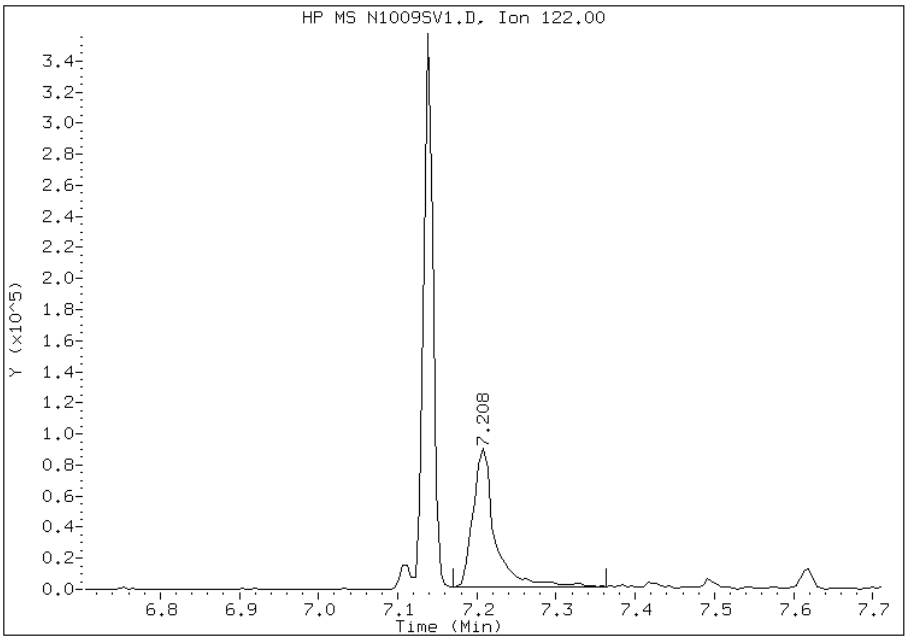
Manual Integration Results

RT: 7.21

Response: 172768

Amount: 18

Conc: 18



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 09:39
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009SV1.D
Inj. Date and Time: 09-OCT-2013 08:47
Instrument ID: 733.i
Client ID:
Compound: 83 2,4-Dinitrophenol
CAS #: 51-28-5
Report Date: 10/09/2013

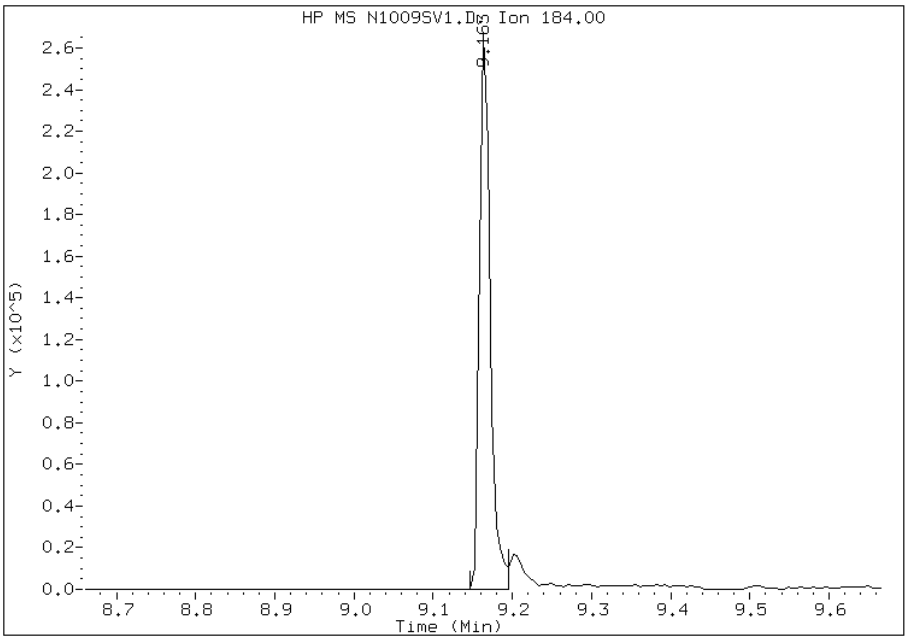
Processing Integration Results

RT: 9.16

Response: 247778

Amount: 34

Conc: 34



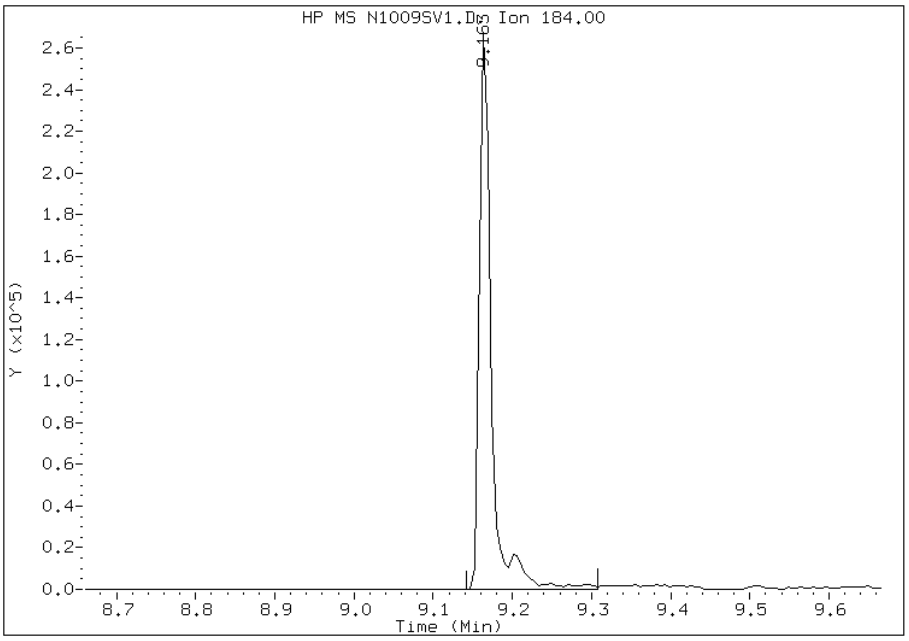
Manual Integration Results

RT: 9.16

Response: 277047

Amount: 37

Conc: 37



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 09:40
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009SV1.D
Inj. Date and Time: 09-OCT-2013 08:47
Instrument ID: 733.i
Client ID:
Compound: 98 4,6-Dinitro-2-methylphenol
CAS #: 534-52-1
Report Date: 10/09/2013

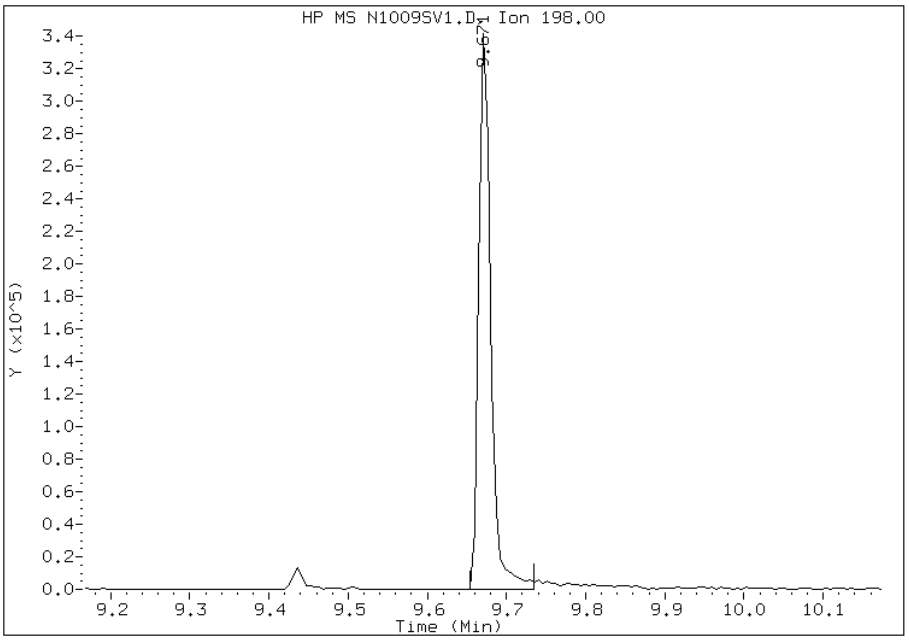
Processing Integration Results

RT: 9.67

Response: 353682

Amount: 38

Conc: 38



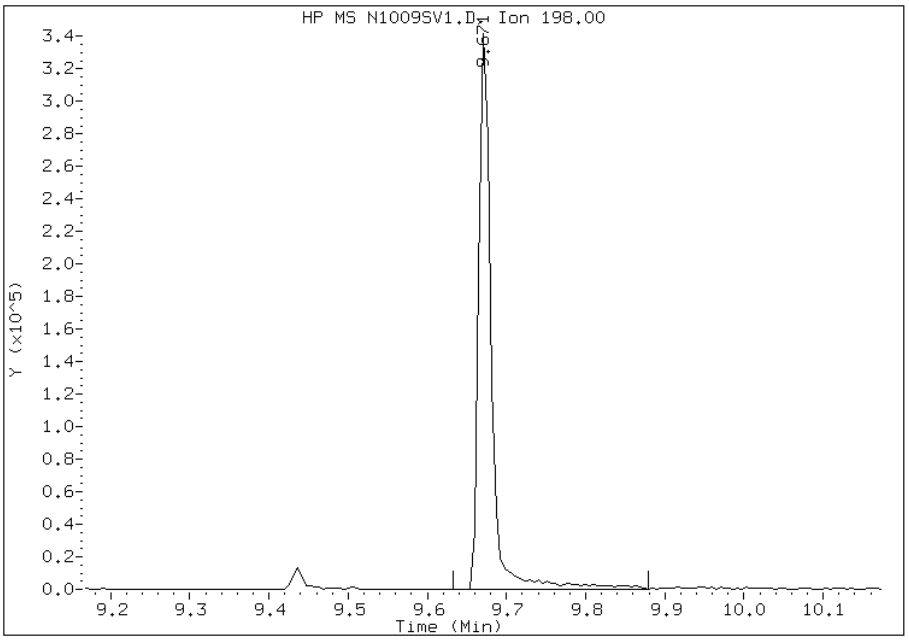
Manual Integration Results

RT: 9.67

Response: 376191

Amount: 40

Conc: 40



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 09:40
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009SV1.D
Inj. Date and Time: 09-OCT-2013 08:47
Instrument ID: 733.i
Client ID:
Compound: 111 Pentachlorophenol
CAS #: 87-86-5
Report Date: 10/09/2013

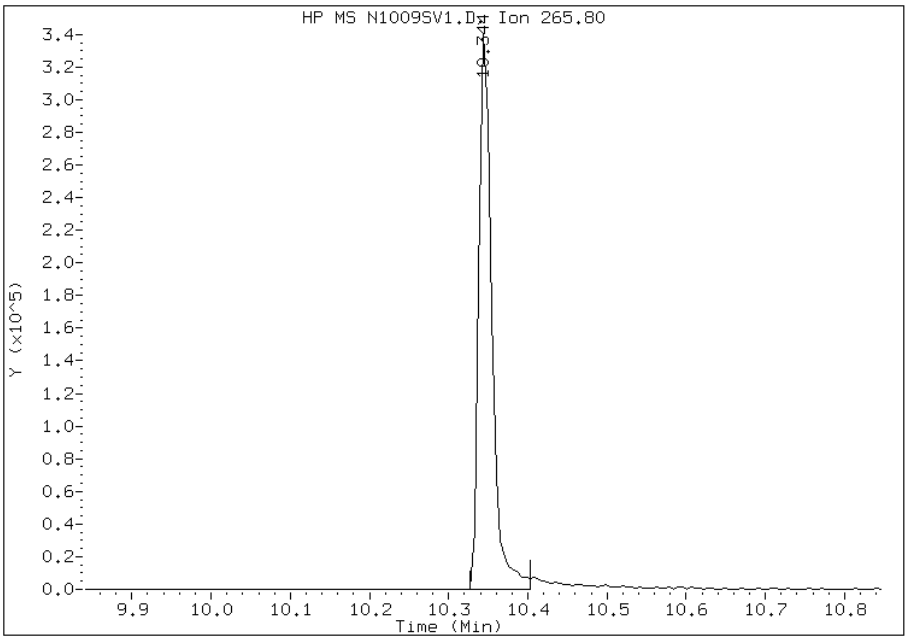
Processing Integration Results

RT: 10.34

Response: 385109

Amount: 37

Conc: 37



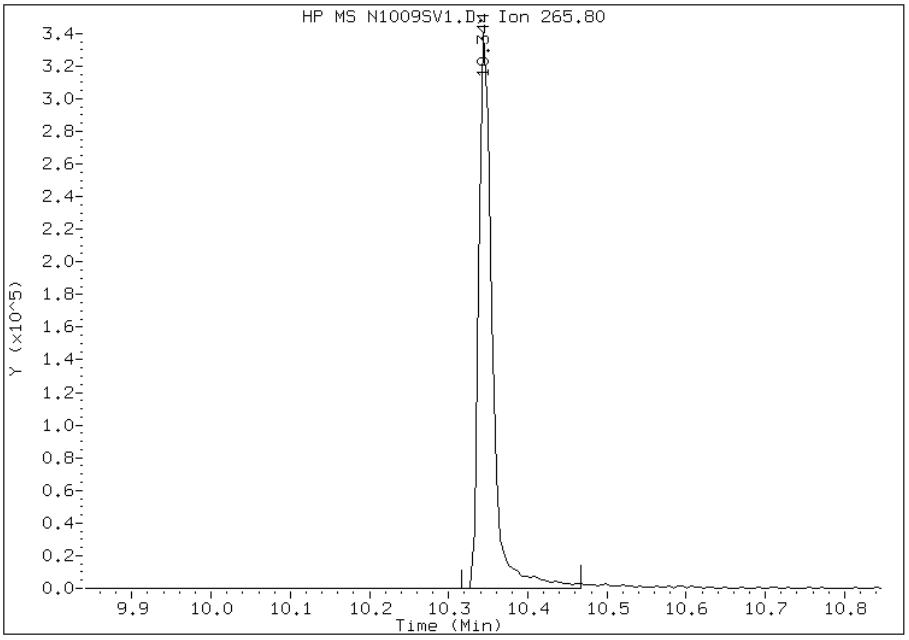
Manual Integration Results

RT: 10.34

Response: 400052

Amount: 38

Conc: 38



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 09:40
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1009SV1.D
Inj. Date and Time: 09-OCT-2013 08:47
Instrument ID: 733.i
Client ID:
Compound: 124 Benzidine
CAS #: 92-87-5
Report Date: 10/09/2013

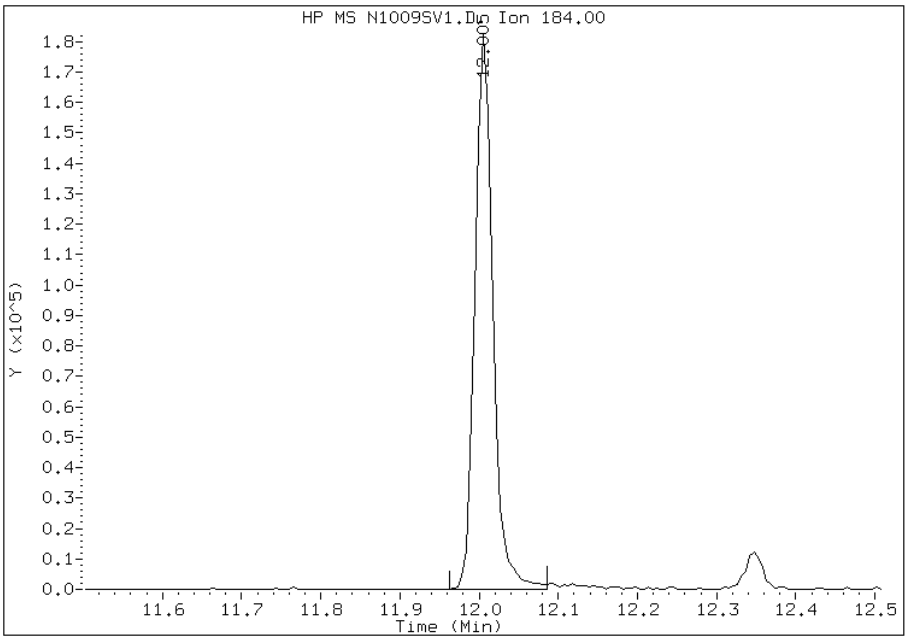
Processing Integration Results

RT: 12.01

Response: 284409

Amount: 14

Conc: 14



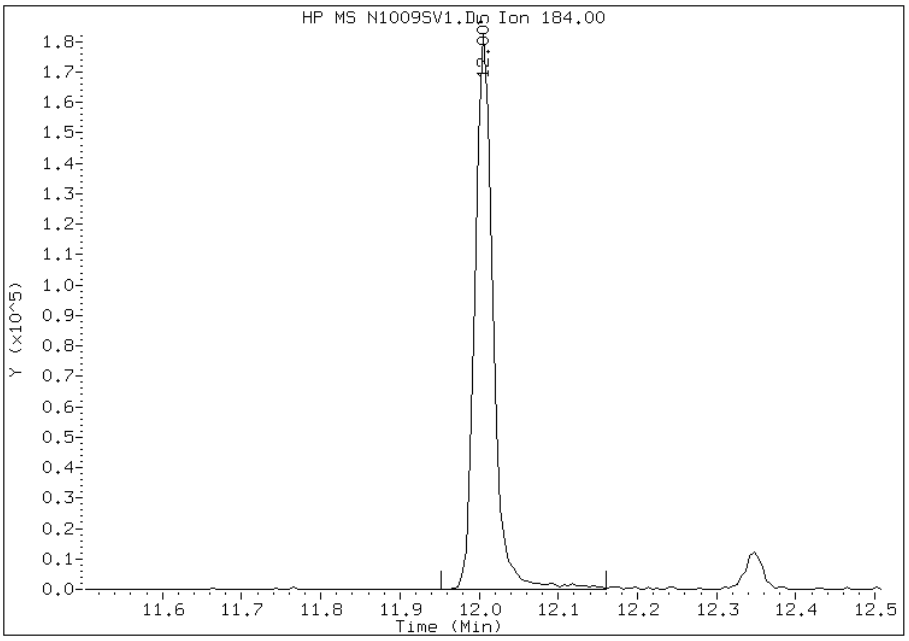
Manual Integration Results

RT: 12.01

Response: 289530

Amount: 16

Conc: 16



Manually Integrated By: piccolinov
Modification Date: 09-Oct-2013 09:41
Manual Integration Reason: Poor Chromatography

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86218/11 Calibration Date: 10/09/2013 09:13

Instrument ID: 733 Calib Start Date: 10/09/2013 05:24

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 10/09/2013 08:22

Lab File ID: N1009SV2.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl methanesulfonate	Ave	0.7469	0.6859	0.0100	9.18	10.0	-8.2	30.0
N-Nitrosopyrrolidine	Ave	0.4779	0.4817	0.0100	10.1	10.0	0.8	30.0
2,6-Dichlorophenol	Ave	0.3140	0.2963	0.0100	9.43	10.0	-5.7	30.0
2,3,5,6-Tetrachlorophenol	Ave	0.3681	0.3271	0.0100	8.89	10.0	-11.1	30.0
2-Naphthylamine	Ave	0.8837	1.071	0.0100	12.1	10.0	21.2	30.0
7,12-Dimethylbenz(a)anthracene	Ave	0.5900	0.5900	0.0100	10.0	10.0	-0.0	30.0

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN100913D.b\N1009SV2.D
Lab Smp Id: ICV 840223
Inj Date : 09-OCT-2013 09:13
Operator : 3200 Inst ID: 733.i
Smp Info : ICV 840223
Misc Info : TN100913D.b,T8270d.m,tasv2.sub
Comment :
Method : \\PITSVR06\D\chem\733.i\TN100913D.b\T8270d.m
Meth Date : 09-Oct-2013 14:14 piccolinov Quant Type: ISTD
Cal Date : 09-OCT-2013 08:22 Cal File: N1009IC8.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: tasv2.sub
Target Version: 4.14
Processing Host: PITPC-502

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

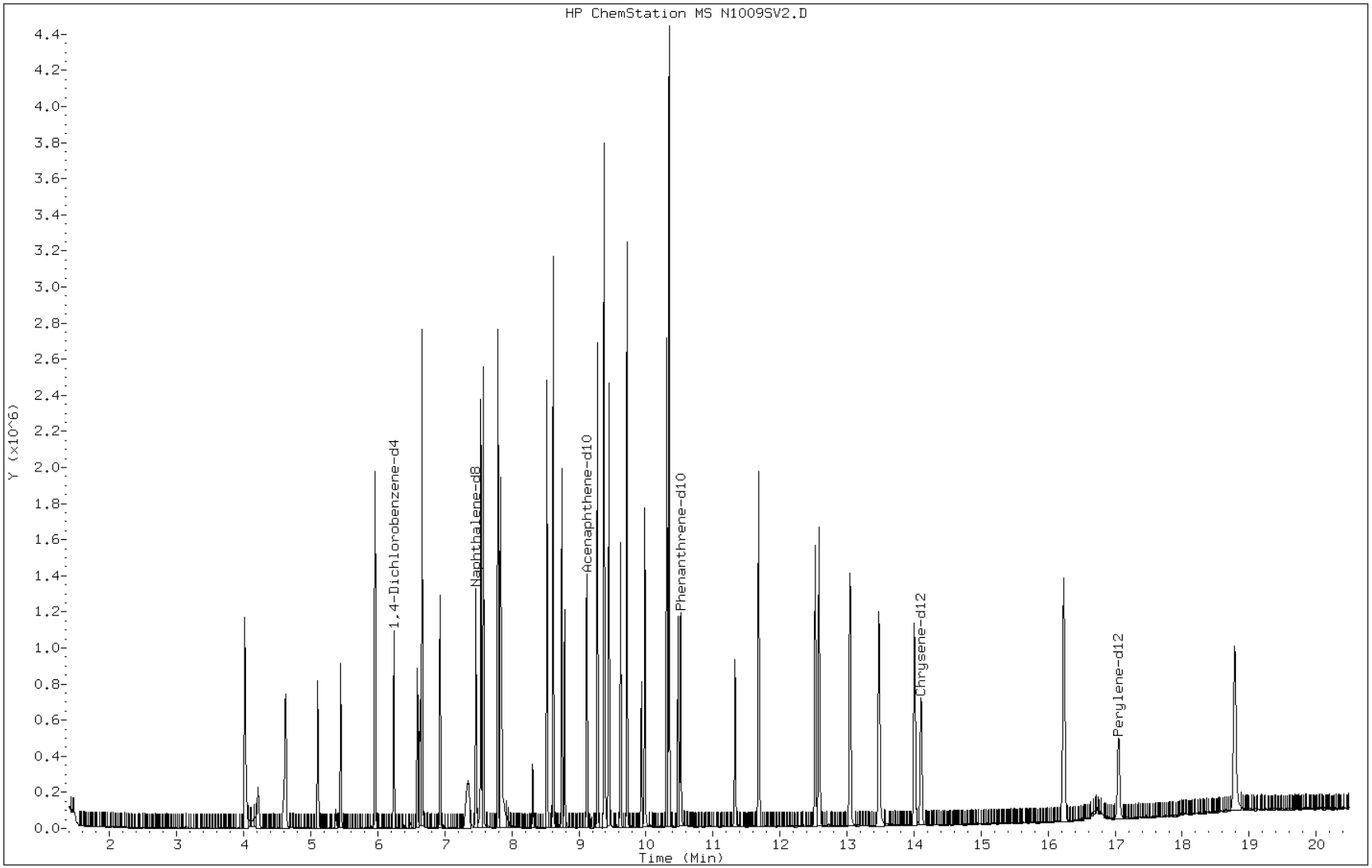
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
* 1	1,4-Dichlorobenzene-d4	152	6.239	6.249	(1.000)	182254	8.00000	
* 2	Naphthalene-d8	136	7.462	7.478	(1.000)	613109	8.00000	
* 3	Acenaphthene-d10	164	9.118	9.134	(1.000)	345462	8.00000	
* 4	Phenanthrene-d10	188	10.518	10.534	(1.000)	542107	8.00000	
* 5	Chrysene-d12	240	14.108	14.134	(1.000)	536512	8.00000	
* 6	Perylene-d12	264	17.051	17.089	(1.000)	434037	8.00000	
16	Methyl methanesulfonate	80	4.625	4.637	(0.741)	312498	18.3663	18.366
36	N-Nitrosopyrrolidine	100	6.591	6.613	(1.057)	219496	20.1621	20.162
54	2,6-Dichlorophenol	162	7.537	7.553	(1.010)	454099	18.8684	18.868
91	2,3,5,6-Tetrachlorophenol	232	9.380	9.396	(1.029)	282502	17.7723	17.772
92	2-Naphthylamine	143	9.449	9.466	(1.036)	925111	24.2422	24.242
143	7,12-dimethylbenz[a]anthracen	256	16.234	16.271	(0.952)	640148	19.9982	19.998

Data File: N1009SV2.D

Date: 09-OCT-2013 09:13

Client ID: Instrument: 733.i

Sample Info: ICV 840223 Operator: 3200



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCVIS 180-87081/25 Calibration Date: 10/17/2013 11:11

Instrument ID: 733 Calib Start Date: 10/09/2013 05:24

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 10/09/2013 08:22

Lab File ID: N10170CC.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5205	0.4699	0.0100	4.51	5.00	-9.7	20.0
N-Nitrosodimethylamine	Ave	0.6476	0.6418	0.0100	4.96	5.00	-0.9	20.0
Pyridine	Ave	1.180	1.154	0.0100	4.89	5.00	-2.2	20.0
Methyl methanesulfonate	Ave	0.7469	0.7457	0.0100	4.99	5.00	-0.1	20.0
Benzaldehyde	Ave	0.9731	0.9710	0.0100	4.99	5.00	-0.2	20.0
Phenol	Ave	1.663	1.592	0.8000	4.79	5.00	-4.2	20.0
Aniline	Ave	1.752	1.799	0.0100	5.14	5.00	2.7	20.0
Bis(2-chloroethyl)ether	Ave	1.056	1.045	0.7000	4.95	5.00	-1.0	20.0
2-Chlorophenol	Ave	1.310	1.283	0.8000	4.90	5.00	-2.1	20.0
1,3-Dichlorobenzene	Ave	1.573	1.606	0.0100	5.10	5.00	2.0	20.0
1,4-Dichlorobenzene	Ave	1.611	1.595	0.0100	4.95	5.00	-1.0	20.0
Benzyl alcohol	Ave	0.7283	0.6986	0.0100	4.80	5.00	-4.1	20.0
1,2-Dichlorobenzene	Ave	1.506	1.509	0.0100	5.01	5.00	0.2	20.0
2-Methylphenol	Ave	1.100	1.050	0.7000	4.77	5.00	-4.5	20.0
Indene	Ave	2.218	2.146	0.0100	4.84	5.00	-3.2	20.0
2,2'-oxybis[1-chloropropane]	Ave	1.153	1.087	0.0100	4.71	5.00	-5.7	20.0
N-Nitrosopyrrolidine	Ave	0.4779	0.4709	0.0100	4.93	5.00	-1.5	20.0
Acetophenone	Ave	1.796	1.654	0.0100	4.60	5.00	-7.9	20.0
N-Nitrosodi-n-propylamine	Ave	0.8019	0.7873	0.5000	4.91	5.00	-1.8	20.0
Methylphenol, 3 & 4	Ave	1.153	1.104	0.6000	4.79	5.00	-4.2	20.0
Hexachloroethane	Ave	0.6034	0.6082	0.3000	5.04	5.00	0.8	20.0
Nitrobenzene	Ave	0.3603	0.3383	0.2000	4.69	5.00	-6.1	20.0
Isophorone	Ave	0.5783	0.5439	0.4000	4.70	5.00	-6.0	20.0
2-Nitrophenol	Ave	0.1960	0.1934	0.1000	4.93	5.00	-1.3	20.0
2,4-Dimethylphenol	Ave	0.3160	0.2863	0.2000	4.53	5.00	-9.4	20.0
Benzoic acid	Qua	0.1556	0.1386	0.0100	9.91	10.0	-0.9	20.0
Bis(2-chloroethoxy)methane	Ave	0.3594	0.3304	0.3000	4.60	5.00	-8.1	20.0
2,4-Dichlorophenol	Ave	0.3260	0.3173	0.2000	4.87	5.00	-2.7	20.0
1,2,4-Trichlorobenzene	Ave	0.3981	0.3920	0.0100	4.92	5.00	-1.5	20.0
Naphthalene	Ave	1.061	1.010	0.7000	4.76	5.00	-4.9	20.0
4-Chloroaniline	Ave	0.4260	0.4085	0.0100	4.79	5.00	-4.1	20.0
2,6-Dichlorophenol	Ave	0.3140	0.3107	0.0100	4.95	5.00	-1.1	20.0
Hexachlorobutadiene	Ave	0.2682	0.2610	0.0100	4.86	5.00	-2.7	20.0
Caprolactam	Ave	0.0763	0.0717	0.0100		5.00	-6.1	20.0
4-Chloro-3-methylphenol	Ave	0.2879	0.2771	0.2000	4.81	5.00	-3.7	20.0
2-Methylnaphthalene	Ave	0.7396	0.6928	0.4000	4.68	5.00	-6.3	20.0
1-Methylnaphthalene	Ave	0.6766	0.6479	0.0100	4.79	5.00	-4.2	20.0
Hexachlorocyclopentadiene	Ave	0.5194	0.4890	0.0500	4.71	5.00	-5.9	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.7583	0.7426	0.0100	4.90	5.00	-2.1	20.0
2,4,6-Trichlorophenol	Ave	0.4201	0.4074	0.2000	4.85	5.00	-3.0	20.0
2,4,5-Trichlorophenol	Ave	0.4416	0.4220	0.2000	4.78	5.00	-4.4	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCVIS 180-87081/25 Calibration Date: 10/17/2013 11:11

Instrument ID: 733 Calib Start Date: 10/09/2013 05:24

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 10/09/2013 08:22

Lab File ID: N10170CC.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1'-Biphenyl	Ave	1.545	1.463	0.0100	4.74	5.00	-5.3	20.0
2-Chloronaphthalene	Ave	1.320	1.220	0.8000	4.62	5.00	-7.5	20.0
2-Nitroaniline	Ave	0.2892	0.2863	0.0100	4.95	5.00	-1.0	20.0
Dimethyl phthalate	Ave	1.286	1.244	0.0100	4.84	5.00	-3.3	20.0
1,3-Dinitrobenzene	Ave	0.1970	0.2009	0.0100	5.10	5.00	1.9	20.0
2,6-Dinitrotoluene	Ave	0.2853	0.2850	0.2000	5.00	5.00	-0.1	20.0
Acenaphthylene	Ave	1.852	1.783	0.9000	4.82	5.00	-3.7	20.0
3-Nitroaniline	Ave	0.2847	0.2793	0.0100	4.91	5.00	-1.9	20.0
2,4-Dinitrophenol	Qua	0.1794	0.1639	0.0100	10.2	10.0	1.7	20.0
Acenaphthene	Ave	1.212	1.106	0.9000	4.56	5.00	-8.8	20.0
4-Nitrophenol	Ave	0.1566	0.1599	0.0100	10.2	10.0	2.1	20.0
2,4-Dinitrotoluene	Ave	0.3678	0.3707	0.2000	5.04	5.00	0.8	20.0
Dibenzofuran	Ave	1.657	1.571	0.8000	4.74	5.00	-5.2	20.0
2,3,5,6-Tetrachlorophenol	Ave	0.3681	0.3712	0.0100	5.04	5.00	0.8	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3819	0.3798	0.0100	4.97	5.00	-0.5	20.0
2-Naphthylamine	Ave	0.8837	0.8014	0.0100	4.53	5.00	-9.3	20.0
Diethyl phthalate	Ave	1.209	1.146	0.0100	4.74	5.00	-5.2	20.0
4-Chlorophenyl phenyl ether	Ave	0.7433	0.7102	0.4000	4.78	5.00	-4.4	20.0
4-Nitroaniline	Ave	0.2743	0.2517	0.0100	4.59	5.00	-8.2	20.0
Fluorene	Ave	1.332	1.249	0.9000	4.69	5.00	-6.3	20.0
4,6-Dinitro-2-methylphenol	Qua	0.1475	0.1458	0.0100	10.4	10.0	4.2	20.0
N-Nitrosodiphenylamine	Ave	0.5434	0.5301	0.0100	4.88	5.00	-2.4	20.0
4-Bromophenyl phenyl ether	Ave	0.2637	0.2634	0.1000	4.99	5.00	-0.1	20.0
Hexachlorobenzene	Ave	0.2472	0.2491	0.1000	5.04	5.00	0.8	20.0
Atrazine	Ave	0.2083	0.2176	0.0100	5.22	5.00	4.5	20.0
Pentachlorophenol	Qua	0.1473	0.1427	0.0500	9.44	10.0	-5.6	20.0
Phenanthrene	Ave	1.120	1.069	0.7000	4.77	5.00	-4.6	20.0
Anthracene	Ave	1.110	1.093	0.7000	4.92	5.00	-1.5	20.0
Carbazole	Ave	0.9611	0.9304	0.0100	4.84	5.00	-3.2	20.0
Di-n-butyl phthalate	Ave	1.095	1.111	0.0100	5.07	5.00	1.4	20.0
Fluoranthene	Ave	1.244	1.247	0.6000	5.01	5.00	0.2	20.0
Benzidine	Qua	0.2846	0.3404	0.0100		5.00	7.3	20.0
Pyrene	Ave	1.270	1.269	0.6000	5.00	5.00	-0.0	20.0
Butyl benzyl phthalate	Ave	0.4337	0.4504	0.0100	5.19	5.00	3.9	20.0
3,3'-Dichlorobenzidine	Ave	0.3827	0.3982	0.0100	5.20	5.00	4.0	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.5761	0.5973	0.0100		5.00	3.7	20.0
Benzo[a]anthracene	Ave	1.152	1.108	0.8000	4.81	5.00	-3.8	20.0
Chrysene	Ave	1.031	1.004	0.7000	4.87	5.00	-2.6	20.0
Di-n-octyl phthalate	Qua	1.125	1.199	0.0100	5.12	5.00	2.4	20.0
7,12-Dimethylbenz(a)anthracene	Ave	0.5900	0.5530	0.0100	4.69	5.00	-6.3	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCVIS 180-87081/25 Calibration Date: 10/17/2013 11:11

Instrument ID: 733 Calib Start Date: 10/09/2013 05:24

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 10/09/2013 08:22

Lab File ID: N10170CC.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[b]fluoranthene	Ave	1.392	1.379	0.7000	4.95	5.00	-1.0	20.0
Benzo[k]fluoranthene	Ave	1.389	1.287	0.7000	4.64	5.00	-7.3	20.0
Benzo[a]pyrene	Ave	1.226	1.218	0.7000	4.97	5.00	-0.7	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.263	1.257	0.5000	4.98	5.00	-0.4	20.0
Dibenz(a,h)anthracene	Ave	1.064	1.053	0.4000	4.95	5.00	-1.0	20.0
Benzo[g,h,i]perylene	Ave	1.049	1.044	0.5000	4.97	5.00	-0.5	20.0
2-Fluorophenol (Surr)	Ave	1.245	1.253		5.03	5.00	0.7	20.0
Phenol-d5 (Surr)	Ave	1.463	1.432		4.89	5.00	-2.1	20.0
Nitrobenzene-d5 (Surr)	Ave	0.3582	0.3397		4.74	5.00	-5.2	20.0
2-Fluorobiphenyl	Ave	1.483	1.442		4.86	5.00	-2.8	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.0879	0.0888	0.0100	5.05	5.00	1.1	20.0
Terphenyl-d14 (Surr)	Ave	0.9466	0.9510		5.02	5.00	0.5	20.0

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN101713D.b\N10170CC.D
Lab Smp Id: CCVIS 984622
Inj Date : 17-OCT-2013 11:11
Operator : 001562 Inst ID: 733.i
Smp Info : CCVIS 984622
Misc Info : TN101713D.b,T8270d.m,tapitt.sub
Comment :
Method : \\PITSVR06\D\chem\733.i\TN101713D.b\T8270d.m
Meth Date : 17-Oct-2013 11:57 piccolinov Quant Type: ISTD
Cal Date : 09-OCT-2013 08:22 Cal File: N1009IC8.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: tapitt.sub
Target Version: 4.14
Processing Host: PITPC-502

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 1	1,4-Dichlorobenzene-d4	152	6.271	6.271	(1.000)	173140	8.00000	
* 2	Naphthalene-d8	136	7.505	7.505	(1.000)	611193	8.00000	
* 3	Acenaphthene-d10	164	9.156	9.156	(1.000)	342713	8.00000	
* 4	Phenanthrene-d10	188	10.540	10.540	(1.000)	542033	8.00000	
* 5	Chrysene-d12	240	14.113	14.113	(1.000)	525782	8.00000	
* 6	Perylene-d12	264	17.062	17.062	(1.000)	408674	8.00000	
198	1,4-Dioxane	88	1.693	1.693	(0.270)	101706	10.0000	9.0278
10	N-Nitrosodimethylamine	74	2.318	2.318	(0.370)	138909	10.0000	9.9111(M)
9	Pyridine	79	2.387	2.387	(0.381)	249824	10.0000	9.7809(M)
16	Methyl methanesulfonate	80	4.642	4.642	(0.740)	161397	10.0000	9.9851
206	Benzaldehyde	77	5.817	5.817	(0.928)	210147	10.0000	9.9782
21	Aniline	93	5.935	5.935	(0.946)	389388	10.0000	10.271
22	Phenol	94	5.924	5.924	(0.945)	344624	10.0000	9.5765
23	bis(2-Chloroethyl)ether	93	6.004	6.004	(0.957)	226259	10.0000	9.9003
24	2-Chlorophenol	128	6.063	6.063	(0.967)	277626	10.0000	9.7917
226	n-Decane	43	6.127	6.127	(0.977)	207680	10.0000	9.6751
26	1,3-Dichlorobenzene	146	6.218	6.218	(0.991)	347487	10.0000	10.205
27	1,4-Dichlorobenzene	146	6.293	6.293	(1.003)	345140	10.0000	9.9015
28	1,2-Dichlorobenzene	146	6.442	6.442	(1.027)	326486	10.0000	10.018
217	Indene	116	6.528	6.528	(1.041)	464407	10.0000	9.6759
29	Benzyl Alcohol	108	6.405	6.405	(1.021)	151202	10.0000	9.5925
30	2-Methylphenol	108	6.522	6.522	(1.040)	227226	10.0000	9.5453
31	2,2'-oxybis(1-Chloropropane)	45	6.538	6.538	(1.043)	235268	10.0000	9.4251
37	Acetophenone	105	6.661	6.661	(1.062)	358056	10.0000	9.2100
32	N-Nitroso-di-n-propylamine	70	6.661	6.661	(1.062)	170396	10.0000	9.8184
192	4-Methylphenol	108	6.667	6.667	(1.063)	238975	10.0000	9.5770
34	Hexachloroethane	117	6.779	6.779	(1.081)	131618	10.0000	10.079
77	1,3-Dinitrobenzene	168	8.905	8.905	(0.973)	86041	10.0000	10.194

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
35 Nitrobenzene	77	6.827	6.827	(0.910)	258474	10.0000	9.3891
36 N-Nitrosopyrrolidine	100	6.629	6.629	(1.057)	101912	10.0000	9.8540
41 Isophorone	82	7.051	7.051	(0.940)	415531	10.0000	9.4048
42 2-Nitrophenol	139	7.137	7.137	(0.951)	147753	10.0000	9.8677
43 2,4-Dimethylphenol	107	7.169	7.169	(0.955)	218713	10.0000	9.0600
44 bis(2-Chloroethoxy)methane	93	7.254	7.254	(0.967)	252392	10.0000	9.1922
48 2,4-Dichlorophenol	162	7.366	7.366	(0.981)	242420	10.0000	9.7342
49 Benzoic Acid	122	7.238	7.238	(0.964)	211768	20.0000	19.819(M)
50 1,2,4-Trichlorobenzene	180	7.452	7.452	(0.993)	299463	10.0000	9.8458
51 Naphthalene	128	7.527	7.527	(1.003)	771345	10.0000	9.5134
52 4-Chloroaniline	127	7.564	7.564	(1.008)	312075	10.0000	9.5879
54 2,6-Dichlorophenol	162	7.580	7.580	(1.010)	237370	10.0000	9.8940
56 Hexachlorobutadiene	225	7.649	7.649	(1.019)	199378	10.0000	9.7299
208 Caprolactam	113	7.863	7.863	(1.048)	54747	10.0000	9.3910(H)
59 4-Chloro-3-Methylphenol	107	8.013	8.013	(1.068)	211694	10.0000	9.6256
62 2-Methylnaphthalene	142	8.178	8.178	(1.090)	529320	10.0000	9.3681
63 1-Methylnaphthalene	142	8.274	8.274	(1.102)	494983	10.0000	9.5764
64 Hexachlorocyclopentadiene	237	8.333	8.333	(0.910)	209465	10.0000	9.4131
65 1,2,4,5-Tetrachlorobenzene	216	8.339	8.339	(0.911)	318114	10.0000	9.7929
66 2,4,6-Trichlorophenol	196	8.435	8.435	(0.921)	174529	10.0000	9.6980
67 2,4,5-Trichlorophenol	196	8.472	8.472	(0.925)	180783	10.0000	9.5568
209 1,1'-Biphenyl	154	8.606	8.606	(0.940)	626849	10.0000	9.4734
70 2-Chloronaphthalene	162	8.638	8.638	(0.943)	522653	10.0000	9.2450
73 2-Nitroaniline	65	8.718	8.718	(0.952)	122656	10.0000	9.9007
76 Dimethylphthalate	163	8.867	8.867	(0.968)	532806	10.0000	9.6746
78 2,6-Dinitrotoluene	165	8.932	8.932	(0.975)	122089	10.0000	9.9901
79 Acenaphthylene	152	9.028	9.028	(0.986)	763981	10.0000	9.6320
81 3-Nitroaniline	138	9.092	9.092	(0.993)	119659	10.0000	9.8127
82 Acenaphthene	153	9.188	9.188	(1.004)	473654	10.0000	9.1215
83 2,4-Dinitrophenol	184	9.188	9.188	(1.004)	140448	20.0000	20.338
85 4-Nitrophenol	109	9.225	9.225	(1.008)	137018	20.0000	20.426
86 Dibenzofuran	168	9.343	9.343	(1.020)	673064	10.0000	9.4831
87 2,4-Dinitrotoluene	165	9.306	9.306	(1.016)	158783	10.0000	10.076
91 2,3,5,6-Tetrachlorophenol	232	9.418	9.418	(1.029)	159009	10.0000	10.084
88 2,3,4,6-Tetrachlorophenol	232	9.455	9.455	(1.033)	162714	10.0000	9.9467
92 2-Naphthylamine	143	9.482	9.482	(1.036)	343320	10.0000	9.0688
93 Diethylphthalate	149	9.509	9.509	(1.039)	491135	10.0000	9.4825
230 n-Hexadecane	57	9.514	9.514	(1.268)	236071	10.0000	9.3161
94 Fluorene	166	9.663	9.663	(1.055)	534924	10.0000	9.3737
95 4-Chlorophenyl-phenylether	204	9.642	9.642	(1.053)	304246	10.0000	9.5550
96 4-Nitroaniline	138	9.658	9.658	(1.055)	107810	10.0000	9.1755
98 4,6-Dinitro-2-methylphenol	198	9.685	9.685	(0.919)	197614	20.0000	20.844
99 N-Nitrosodiphenylamine (1)	169	9.749	9.749	(0.925)	359152	10.0000	9.7553
100 1,2-Diphenylhydrazine	77	9.792	9.792	(0.929)	459163	10.0000	9.7143
106 4-Bromophenyl-phenylether	248	10.096	10.096	(0.958)	178466	10.0000	9.9875
107 Hexachlorobenzene	284	10.187	10.187	(0.967)	168766	10.0000	10.075
210 Atrazine	200	10.214	10.214	(0.969)	147450	10.0000	10.447
227 n-Octadecane	57	10.358	10.358	(1.652)	234975	10.0000	9.5444
111 Pentachlorophenol	266	10.358	10.358	(0.983)	193389	20.0000	18.880
115 Phenanthrene	178	10.566	10.566	(1.003)	724601	10.0000	9.5446
116 Anthracene	178	10.614	10.614	(1.007)	740857	10.0000	9.8474
119 Carbazole	167	10.759	10.759	(1.021)	630361	10.0000	9.6805
120 Di-n-Butylphthalate	149	11.052	11.052	(1.049)	752667	10.0000	10.142
123 Fluoranthene	202	11.875	11.875	(1.127)	844653	10.0000	10.018

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
124 Benzidine	184	12.003	12.003	(0.850)	223692	10.0000	10.729
125 Pyrene	202	12.180	12.180	(0.863)	834209	10.0000	9.9978
131 Butylbenzylphthalate	149	13.040	13.040	(0.924)	296033	10.0000	10.386
135 3,3'-Dichlorobenzidine	252	14.012	14.012	(0.993)	261692	10.0000	10.404
136 Benzo(a)Anthracene	228	14.097	14.097	(0.999)	728333	10.0000	9.6228
137 Chrysene	228	14.167	14.167	(1.004)	660176	10.0000	9.7434
139 bis(2-ethylhexyl)Phthalate	149	14.049	14.049	(0.995)	392583	10.0000	10.368
140 Di-n-octylphthalate	149	15.364	15.364	(0.900)	612410	10.0000	10.238
141 Benzo(b)fluoranthene	252	16.261	16.261	(0.953)	704224	10.0000	9.9008
142 Benzo(k)fluoranthene	252	16.314	16.314	(0.956)	657680	10.0000	9.2721
143 7,12-dimethylbenz[a]anthracen	256	16.240	16.240	(0.952)	282480	10.0000	9.3723
146 Benzo(a)pyrene	252	16.945	16.945	(0.993)	622246	10.0000	9.9315
149 Indeno(1,2,3-cd)pyrene	276	19.306	19.306	(1.131)	642186	10.0000	9.9551
150 Dibenz(a,h)anthracene	278	19.333	19.333	(1.133)	537953	10.0000	9.8965
151 Benzo(g,h,i)perylene	276	19.910	19.910	(1.167)	533092	10.0000	9.9477
$ 154 Nitrobenzene-d5	82	6.811	6.811	(0.907)	259512	10.0000	9.4817
$ 155 2-Fluorobiphenyl	172	8.510	8.510	(0.929)	617731	10.0000	9.7203
$ 156 Terphenyl-d14	244	12.340	12.340	(0.874)	625049	10.0000	10.047
$ 157 Phenol-d5	99	5.913	5.913	(0.943)	309870	10.0000	9.7890
$ 158 2-Fluorophenol	112	4.888	4.888	(0.779)	271271	10.0000	10.069
$ 159 2,4,6-Tribromophenol	330	9.888	9.888	(0.938)	60191	10.0000	10.105

QC Flag Legend

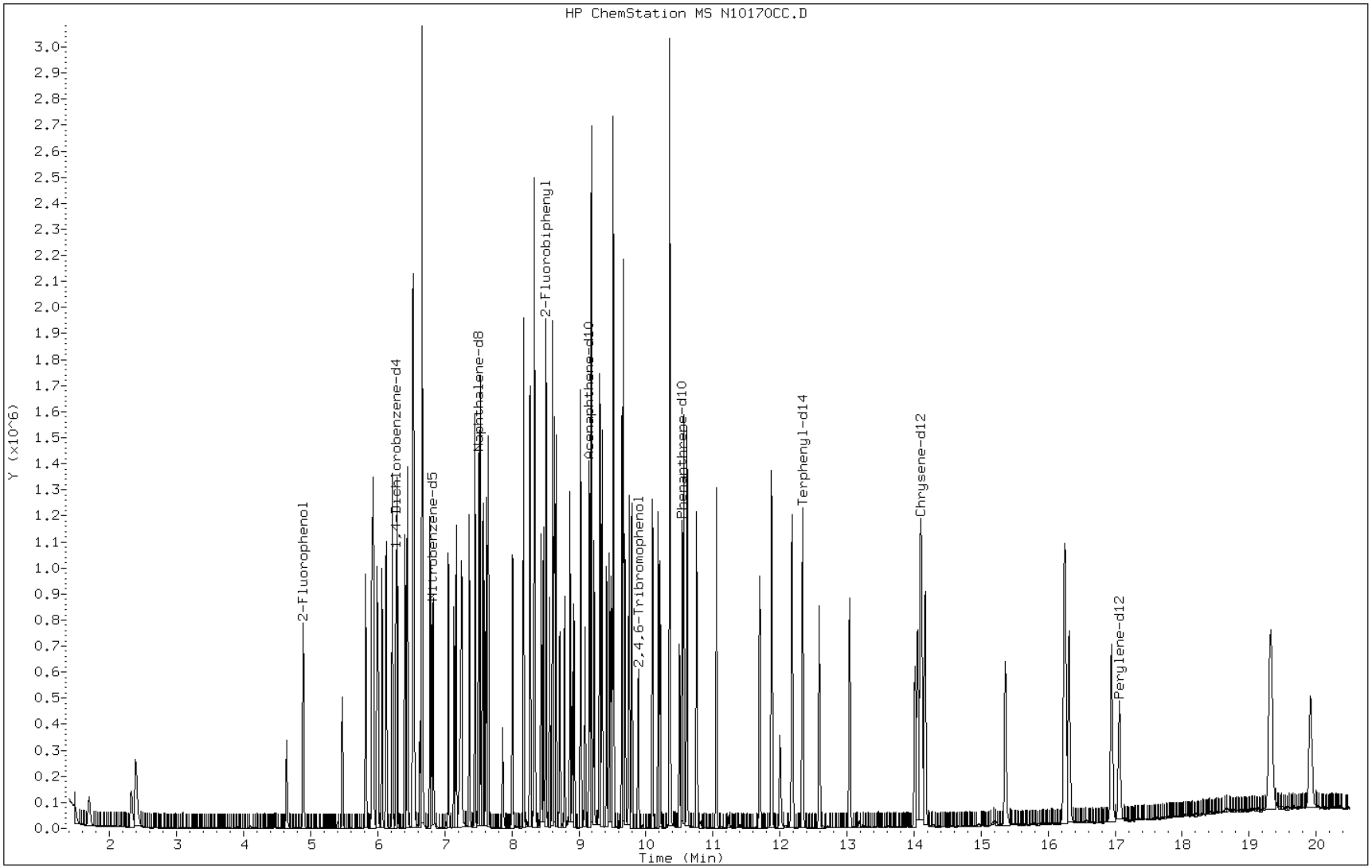
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: N10170CC.D

Date: 17-OCT-2013 11:11

Client ID: Instrument: 733.i

Sample Info: CCVIS 984622 Operator: 001562



Manual Integration Report

Data File: N10170CC.D
Inj. Date and Time: 17-OCT-2013 11:11
Instrument ID: 733.i
Client ID:
Compound: 10 N-Nitrosodimethylamine
CAS #: 62-75-9
Report Date: 10/18/2013

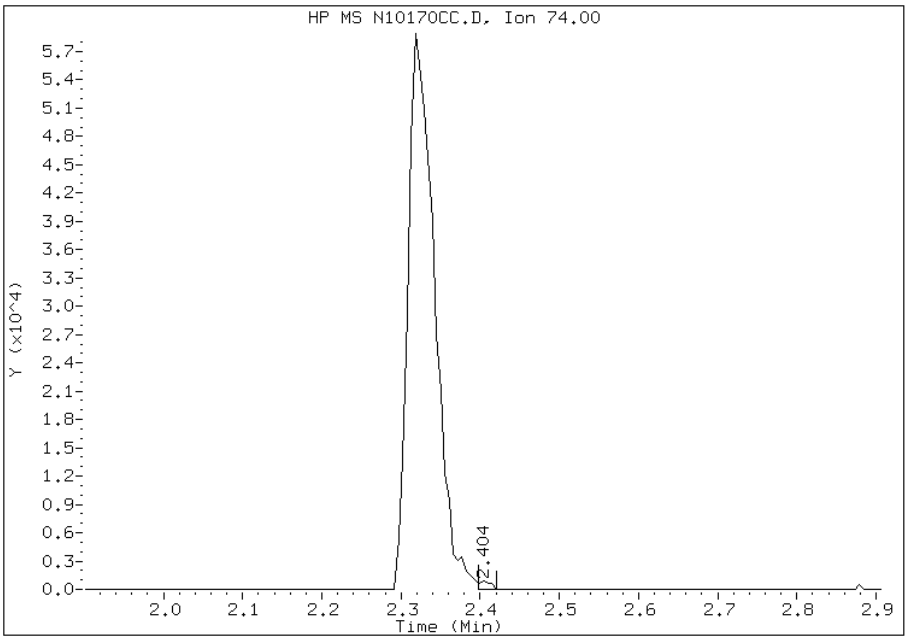
Processing Integration Results

RT: 2.40

Response: 863

Amount: 0

Conc: 0



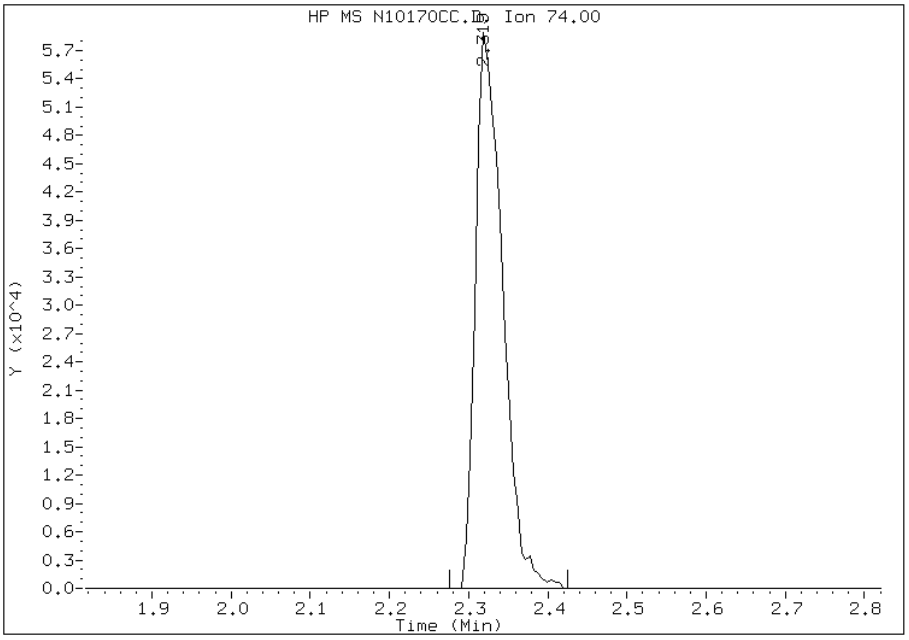
Manual Integration Results

RT: 2.32

Response: 138909

Amount: 10

Conc: 10



Manually Integrated By: piccolinov
Modification Date: 17-Oct-2013 11:58
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N10170CC.D
Inj. Date and Time: 17-OCT-2013 11:11
Instrument ID: 733.i
Client ID:
Compound: 9 Pyridine
CAS #: 110-86-1
Report Date: 10/18/2013

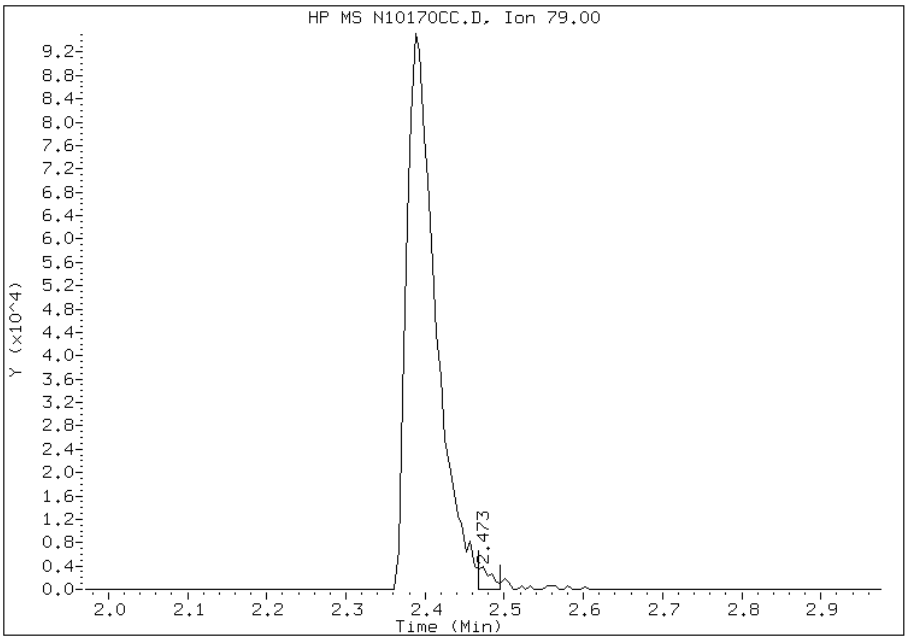
Processing Integration Results

RT: 2.47

Response: 4662

Amount: 0

Conc: 0



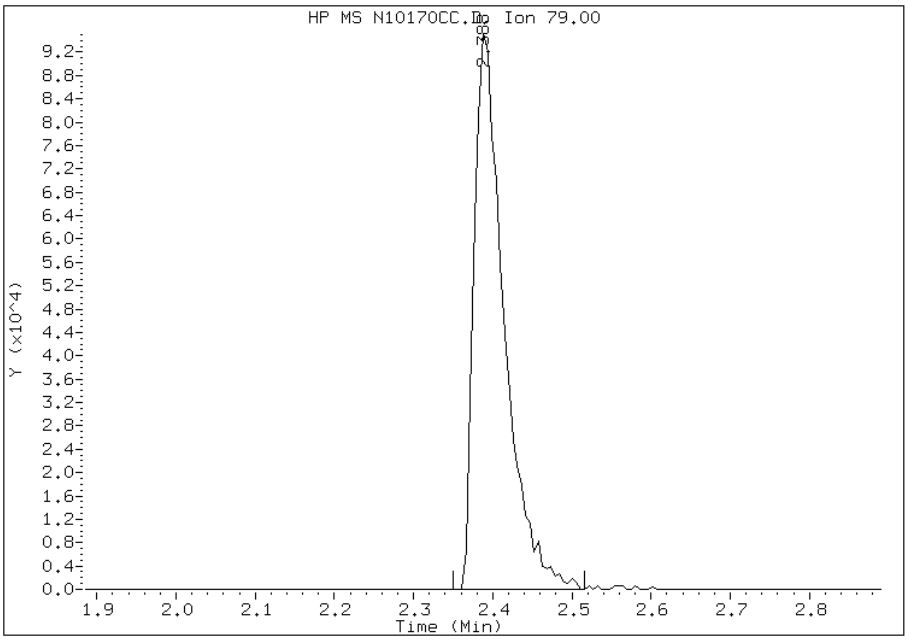
Manual Integration Results

RT: 2.39

Response: 249824

Amount: 10

Conc: 10



Manually Integrated By: piccolinov
Modification Date: 17-Oct-2013 11:58
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N10170CC.D
Inj. Date and Time: 17-OCT-2013 11:11
Instrument ID: 733.i
Client ID:
Compound: 49 Benzoic Acid
CAS #: 65-85-0
Report Date: 10/18/2013

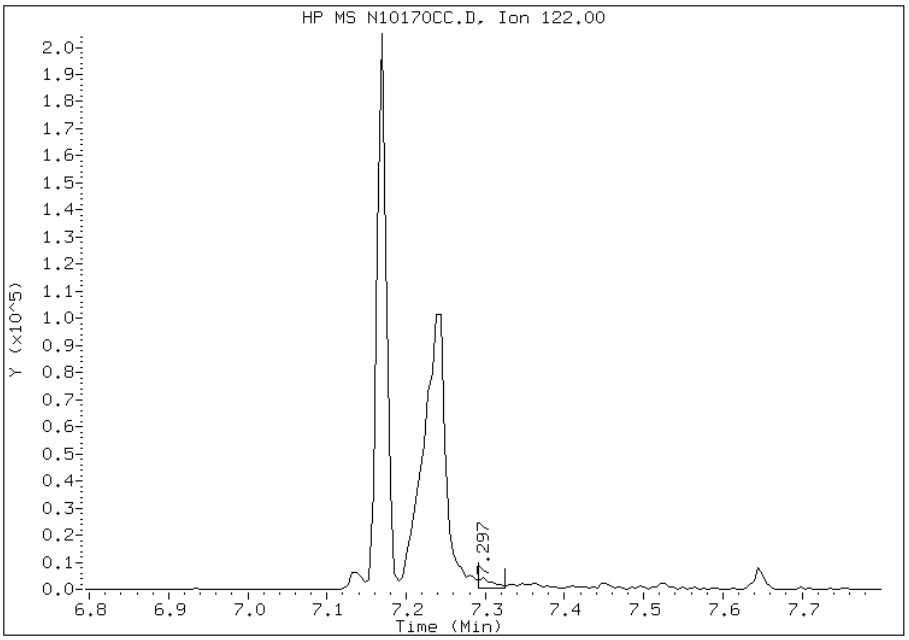
Processing Integration Results

RT: 7.30

Response: 4769

Amount: 5

Conc: 5



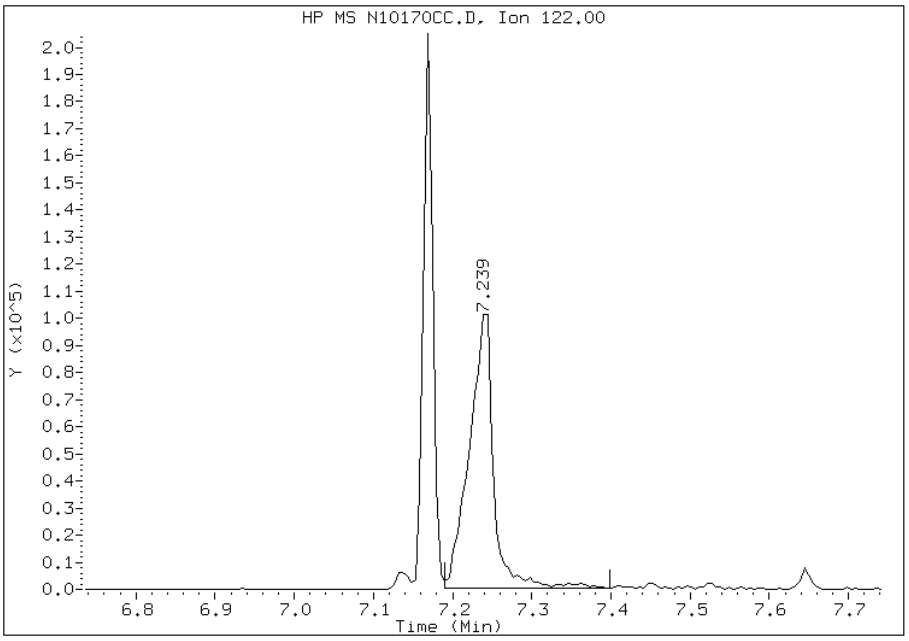
Manual Integration Results

RT: 7.24

Response: 211768

Amount: 20

Conc: 20



Manually Integrated By: piccolinov
Modification Date: 17-Oct-2013 11:58
Manual Integration Reason: Poor Chromatography

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCVIS 180-87196/8 Calibration Date: 10/18/2013 11:31

Instrument ID: 733 Calib Start Date: 10/09/2013 05:24

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 10/09/2013 08:22

Lab File ID: N10180CC.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5205	0.4566	0.0100	4.39	5.00	-12.3	20.0
N-Nitrosodimethylamine	Ave	0.6476	0.5932	0.0100	4.58	5.00	-8.4	20.0
Pyridine	Ave	1.180	1.121	0.0100	4.75	5.00	-5.0	20.0
Methyl methanesulfonate	Ave	0.7469	0.6925	0.0100	4.64	5.00	-7.3	20.0
Benzaldehyde	Ave	0.9731	0.9462	0.0100	4.86	5.00	-2.8	20.0
Phenol	Ave	1.663	1.503	0.8000	4.52	5.00	-9.6	20.0
Aniline	Ave	1.752	1.747	0.0100	4.99	5.00	-0.3	20.0
Bis(2-chloroethyl)ether	Ave	1.056	0.9689	0.7000	4.59	5.00	-8.3	20.0
2-Chlorophenol	Ave	1.310	1.261	0.8000	4.81	5.00	-3.8	20.0
1,3-Dichlorobenzene	Ave	1.573	1.523	0.0100	4.84	5.00	-3.2	20.0
1,4-Dichlorobenzene	Ave	1.611	1.538	0.0100	4.77	5.00	-4.5	20.0
Benzyl alcohol	Ave	0.7283	0.6950	0.0100	4.77	5.00	-4.6	20.0
1,2-Dichlorobenzene	Ave	1.506	1.456	0.0100	4.83	5.00	-3.3	20.0
2-Methylphenol	Ave	1.100	1.049	0.7000	4.77	5.00	-4.6	20.0
Indene	Ave	2.218	2.102	0.0100	4.74	5.00	-5.2	20.0
2,2'-oxybis[1-chloropropane]	Ave	1.153	1.049	0.0100	4.55	5.00	-9.1	20.0
N-Nitrosopyrrolidine	Ave	0.4779	0.4683	0.0100	4.90	5.00	-2.0	20.0
Acetophenone	Ave	1.796	1.618	0.0100	4.50	5.00	-9.9	20.0
N-Nitrosodi-n-propylamine	Ave	0.8019	0.7475	0.5000	4.66	5.00	-6.8	20.0
Methylphenol, 3 & 4	Ave	1.153	1.078	0.6000	4.67	5.00	-6.5	20.0
Hexachloroethane	Ave	0.6034	0.5734	0.3000	4.75	5.00	-5.0	20.0
Nitrobenzene	Ave	0.3603	0.3328	0.2000	4.62	5.00	-7.7	20.0
Isophorone	Ave	0.5783	0.5516	0.4000	4.77	5.00	-4.6	20.0
2-Nitrophenol	Ave	0.1960	0.1954	0.1000	4.99	5.00	-0.3	20.0
2,4-Dimethylphenol	Ave	0.3160	0.2778	0.2000	4.40	5.00	-12.1	20.0
Benzoic acid	Qua	0.1556	0.1584	0.0100	11.0	10.0	9.9	20.0
Bis(2-chloroethoxy)methane	Ave	0.3594	0.3339	0.3000	4.65	5.00	-7.1	20.0
2,4-Dichlorophenol	Ave	0.3260	0.3283	0.2000	5.04	5.00	0.7	20.0
1,2,4-Trichlorobenzene	Ave	0.3981	0.3906	0.0100	4.91	5.00	-1.9	20.0
Naphthalene	Ave	1.061	1.001	0.7000	4.72	5.00	-5.6	20.0
4-Chloroaniline	Ave	0.4260	0.3990	0.0100	4.68	5.00	-6.4	20.0
2,6-Dichlorophenol	Ave	0.3140	0.3084	0.0100	4.91	5.00	-1.8	20.0
Hexachlorobutadiene	Ave	0.2682	0.2616	0.0100	4.88	5.00	-2.5	20.0
Caprolactam	Ave	0.0763	0.0775	0.0100		5.00	1.5	20.0
4-Chloro-3-methylphenol	Ave	0.2879	0.2718	0.2000	4.72	5.00	-5.6	20.0
2-Methylnaphthalene	Ave	0.7396	0.7231	0.4000	4.89	5.00	-2.2	20.0
1-Methylnaphthalene	Ave	0.6766	0.6455	0.0100	4.77	5.00	-4.6	20.0
Hexachlorocyclopentadiene	Ave	0.5194	0.5104	0.0500	4.91	5.00	-1.7	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.7583	0.7471	0.0100	4.93	5.00	-1.5	20.0
2,4,6-Trichlorophenol	Ave	0.4201	0.4483	0.2000	5.34	5.00	6.7	20.0
2,4,5-Trichlorophenol	Ave	0.4416	0.4428	0.2000	5.01	5.00	0.3	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCVIS 180-87196/8 Calibration Date: 10/18/2013 11:31

Instrument ID: 733 Calib Start Date: 10/09/2013 05:24

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 10/09/2013 08:22

Lab File ID: N10180CC.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1'-Biphenyl	Ave	1.545	1.499	0.0100	4.85	5.00	-3.0	20.0
2-Chloronaphthalene	Ave	1.320	1.263	0.8000	4.78	5.00	-4.3	20.0
2-Nitroaniline	Ave	0.2892	0.2894	0.0100	5.00	5.00	0.0	20.0
Dimethyl phthalate	Ave	1.286	1.263	0.0100	4.91	5.00	-1.8	20.0
1,3-Dinitrobenzene	Ave	0.1970	0.2051	0.0100	5.20	5.00	4.1	20.0
2,6-Dinitrotoluene	Ave	0.2853	0.2901	0.2000	5.08	5.00	1.7	20.0
Acenaphthylene	Ave	1.852	1.851	0.9000	5.00	5.00	-0.0	20.0
3-Nitroaniline	Ave	0.2847	0.2887	0.0100	5.07	5.00	1.4	20.0
2,4-Dinitrophenol	Qua	0.1794	0.1610	0.0100	10.0	10.0	0.4	20.0
Acenaphthene	Ave	1.212	1.171	0.9000	4.83	5.00	-3.4	20.0
4-Nitrophenol	Ave	0.1566	0.1486	0.0100	9.49	10.0	-5.1	20.0
2,4-Dinitrotoluene	Ave	0.3678	0.3872	0.2000	5.26	5.00	5.3	20.0
Dibenzofuran	Ave	1.657	1.591	0.8000	4.80	5.00	-4.0	20.0
2,3,5,6-Tetrachlorophenol	Ave	0.3681	0.3772	0.0100	5.12	5.00	2.5	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3819	0.3851	0.0100	5.04	5.00	0.8	20.0
2-Naphthylamine	Ave	0.8837	0.8184	0.0100	4.63	5.00	-7.4	20.0
Diethyl phthalate	Ave	1.209	1.182	0.0100	4.89	5.00	-2.2	20.0
4-Chlorophenyl phenyl ether	Ave	0.7433	0.7399	0.4000	4.98	5.00	-0.5	20.0
4-Nitroaniline	Ave	0.2743	0.2565	0.0100	4.68	5.00	-6.5	20.0
Fluorene	Ave	1.332	1.298	0.9000	4.87	5.00	-2.5	20.0
4,6-Dinitro-2-methylphenol	Qua	0.1475	0.1299	0.0100	9.37	10.0	-6.3	20.0
N-Nitrosodiphenylamine	Ave	0.5434	0.5395	0.0100	4.96	5.00	-0.7	20.0
4-Bromophenyl phenyl ether	Ave	0.2637	0.2672	0.1000	5.07	5.00	1.3	20.0
Hexachlorobenzene	Ave	0.2472	0.2572	0.1000	5.20	5.00	4.0	20.0
Atrazine	Ave	0.2083	0.2278	0.0100	5.47	5.00	9.4	20.0
Pentachlorophenol	Qua	0.1473	0.1271	0.0500	8.53	10.0	-14.7	20.0
Phenanthrene	Ave	1.120	1.087	0.7000	4.85	5.00	-3.0	20.0
Anthracene	Ave	1.110	1.100	0.7000	4.96	5.00	-0.9	20.0
Carbazole	Ave	0.9611	0.9165	0.0100	4.77	5.00	-4.6	20.0
Di-n-butyl phthalate	Ave	1.095	1.078	0.0100	4.92	5.00	-1.6	20.0
Fluoranthene	Ave	1.244	1.233	0.6000	4.95	5.00	-0.9	20.0
Benzidine	Qua	0.2846	0.2783	0.0100		5.00	-16.6	20.0
Pyrene	Ave	1.270	1.263	0.6000	4.97	5.00	-0.5	20.0
Butyl benzyl phthalate	Ave	0.4337	0.4598	0.0100	5.30	5.00	6.0	20.0
3,3'-Dichlorobenzidine	Ave	0.3827	0.3970	0.0100	5.19	5.00	3.7	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.5761	0.6218	0.0100		5.00	7.9	20.0
Benzo[a]anthracene	Ave	1.152	1.110	0.8000	4.82	5.00	-3.6	20.0
Chrysene	Ave	1.031	0.995	0.7000	4.83	5.00	-3.5	20.0
Di-n-octyl phthalate	Qua	1.125	1.257	0.0100	5.35	5.00	7.1	20.0
7,12-Dimethylbenz(a)anthracene	Ave	0.5900	0.5544	0.0100	4.70	5.00	-6.0	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCVIS 180-87196/8 Calibration Date: 10/18/2013 11:31

Instrument ID: 733 Calib Start Date: 10/09/2013 05:24

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 10/09/2013 08:22

Lab File ID: N10180CC.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[b]fluoranthene	Ave	1.392	1.344	0.7000	4.83	5.00	-3.5	20.0
Benzo[k]fluoranthene	Ave	1.389	1.300	0.7000	4.68	5.00	-6.4	20.0
Benzo[a]pyrene	Ave	1.226	1.190	0.7000	4.85	5.00	-3.0	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.263	1.241	0.5000	4.92	5.00	-1.7	20.0
Dibenz(a,h)anthracene	Ave	1.064	1.063	0.4000	4.99	5.00	-0.1	20.0
Benzo[g,h,i]perylene	Ave	1.049	1.029	0.5000	4.90	5.00	-1.9	20.0
2-Fluorophenol (Surr)	Ave	1.245	1.206		4.84	5.00	-3.2	20.0
Phenol-d5 (Surr)	Ave	1.463	1.416		4.84	5.00	-3.2	20.0
Nitrobenzene-d5 (Surr)	Ave	0.3582	0.3379		4.72	5.00	-5.7	20.0
2-Fluorobiphenyl	Ave	1.483	1.465		4.94	5.00	-1.3	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.0879	0.0962	0.0100	5.47	5.00	9.4	20.0
Terphenyl-d14 (Surr)	Ave	0.9466	0.9496		5.02	5.00	0.3	20.0

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN101813D.b\N10180CC.D
Lab Smp Id: CCVIS 984622
Inj Date : 18-OCT-2013 11:31
Operator : 3200 Inst ID: 733.i
Smp Info : CCVIS 984622
Misc Info : TN101813D.b,T8270d.m,tapitt.sub
Comment :
Method : \\PITSVR06\D\chem\733.i\TN101813D.b\T8270d.m
Meth Date : 19-Oct-2013 05:41 733.i Quant Type: ISTD
Cal Date : 09-OCT-2013 08:22 Cal File: N1009IC8.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: tapitt.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 1	1,4-Dichlorobenzene-d4	152	6.275	6.275	(1.000)	204457	8.00000	
* 2	Naphthalene-d8	136	7.520	7.520	(1.000)	712087	8.00000	
* 3	Acenaphthene-d10	164	9.176	9.176	(1.000)	399548	8.00000	
* 4	Phenanthrene-d10	188	10.565	10.565	(1.000)	645528	8.00000	
* 5	Chrysene-d12	240	14.160	14.160	(1.000)	614576	8.00000	
* 6	Perylene-d12	264	17.120	17.120	(1.000)	490762	8.00000	
198	1,4-Dioxane	88	1.702	1.702	(0.271)	116689	10.0000	8.7713
10	N-Nitrosodimethylamine	74	2.333	2.333	(0.372)	151606	10.0000	9.1602
9	Pyridine	79	2.402	2.402	(0.383)	286592	10.0000	9.5018(M)
16	Methyl methanesulfonate	80	4.641	4.641	(0.740)	176983	10.0000	9.2722
206	Benzaldehyde	77	5.821	5.821	(0.928)	241819	10.0000	9.7233
21	Aniline	93	5.939	5.939	(0.946)	446488	10.0000	9.9732
22	Phenol	94	5.933	5.933	(0.946)	384065	10.0000	9.0378
23	bis(2-Chloroethyl)ether	93	6.008	6.008	(0.957)	247609	10.0000	9.1749
24	2-Chlorophenol	128	6.067	6.067	(0.967)	322154	10.0000	9.6218
226	n-Decane	43	6.126	6.126	(0.976)	232120	10.0000	9.1573
26	1,3-Dichlorobenzene	146	6.222	6.222	(0.991)	389181	10.0000	9.6784
27	1,4-Dichlorobenzene	146	6.297	6.297	(1.003)	392942	10.0000	9.5462
28	1,2-Dichlorobenzene	146	6.452	6.452	(1.028)	371999	10.0000	9.6663
217	Indene	116	6.537	6.537	(1.042)	537194	10.0000	9.4780
29	Benzyl Alcohol	108	6.414	6.414	(1.022)	177620	10.0000	9.5425
30	2-Methylphenol	108	6.532	6.532	(1.041)	268183	10.0000	9.5402
31	2,2'-oxybis(1-Chloropropane)	45	6.548	6.548	(1.043)	267966	10.0000	9.0907
37	Acetophenone	105	6.671	6.671	(1.063)	413612	10.0000	9.0094
32	N-Nitroso-di-n-propylamine	70	6.671	6.671	(1.063)	191046	10.0000	9.3221
192	4-Methylphenol	108	6.676	6.676	(1.064)	275479	10.0000	9.3489
34	Hexachloroethane	117	6.788	6.788	(1.082)	146545	10.0000	9.5032
77	1,3-Dinitrobenzene	168	8.925	8.925	(0.973)	102436	10.0000	10.410
35	Nitrobenzene	77	6.836	6.836	(0.909)	296192	10.0000	9.2348

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
36	N-Nitrosopyrrolidine	100	6.639	6.639	(1.058)	119692	10.0000	9.8005
41	Isophorone	82	7.066	7.066	(0.940)	490982	10.0000	9.5380
42	2-Nitrophenol	139	7.146	7.146	(0.950)	173949	10.0000	9.9712
43	2,4-Dimethylphenol	107	7.184	7.184	(0.955)	247290	10.0000	8.7924
44	bis(2-Chloroethoxy)methane	93	7.264	7.264	(0.966)	297189	10.0000	9.2901
48	2,4-Dichlorophenol	162	7.381	7.381	(0.982)	292247	10.0000	10.072
49	Benzoic Acid	122	7.264	7.264	(0.966)	281922	20.0000	21.972(M)
50	1,2,4-Trichlorobenzene	180	7.461	7.461	(0.992)	347638	10.0000	9.8102
51	Naphthalene	128	7.541	7.541	(1.003)	891346	10.0000	9.4358
52	4-Chloroaniline	127	7.579	7.579	(1.008)	355130	10.0000	9.3648
54	2,6-Dichlorophenol	162	7.595	7.595	(1.010)	274483	10.0000	9.8199
56	Hexachlorobutadiene	225	7.659	7.659	(1.018)	232886	10.0000	9.7548
208	Caprolactam	113	7.889	7.889	(1.049)	68944	10.0000	10.151
59	4-Chloro-3-Methylphenol	107	8.033	8.033	(1.068)	241913	10.0000	9.4412
62	2-Methylnaphthalene	142	8.193	8.193	(1.090)	643618	10.0000	9.7770
63	1-Methylnaphthalene	142	8.289	8.289	(1.102)	574538	10.0000	9.5406
64	Hexachlorocyclopentadiene	237	8.348	8.348	(0.910)	254917	10.0000	9.8261
65	1,2,4,5-Tetrachlorobenzene	216	8.353	8.353	(0.910)	373113	10.0000	9.8521
66	2,4,6-Trichlorophenol	196	8.455	8.455	(0.921)	223906	10.0000	10.672
67	2,4,5-Trichlorophenol	196	8.492	8.492	(0.925)	221151	10.0000	10.028
209	1,1'-Biphenyl	154	8.626	8.626	(0.940)	748570	10.0000	9.7037
70	2-Chloronaphthalene	162	8.658	8.658	(0.944)	630560	10.0000	9.5672
73	2-Nitroaniline	65	8.738	8.738	(0.952)	144557	10.0000	10.009
76	Dimethylphthalate	163	8.888	8.888	(0.969)	630786	10.0000	9.8244
78	2,6-Dinitrotoluene	165	8.952	8.952	(0.976)	144873	10.0000	10.168
79	Acenaphthylene	152	9.048	9.048	(0.986)	924280	10.0000	9.9954
81	3-Nitroaniline	138	9.117	9.117	(0.994)	144184	10.0000	10.142
82	Acenaphthene	153	9.208	9.208	(1.003)	584610	10.0000	9.6568
83	2,4-Dinitrophenol	184	9.208	9.208	(1.003)	160855	20.0000	20.075
85	4-Nitrophenol	109	9.251	9.251	(1.008)	148389	20.0000	18.975
86	Dibenzofuran	168	9.368	9.368	(1.021)	794489	10.0000	9.6016
87	2,4-Dinitrotoluene	165	9.331	9.331	(1.017)	193370	10.0000	10.525
91	2,3,5,6-Tetrachlorophenol	232	9.438	9.438	(1.029)	188380	10.0000	10.247
88	2,3,4,6-Tetrachlorophenol	232	9.475	9.475	(1.033)	192334	10.0000	10.085
92	2-Naphthylamine	143	9.507	9.507	(1.036)	408752	10.0000	9.2612
93	Diethylphthalate	149	9.534	9.534	(1.039)	590434	10.0000	9.7781
230	n-Hexadecane	57	9.539	9.539	(1.269)	266356	10.0000	9.0219
94	Fluorene	166	9.689	9.689	(1.056)	648354	10.0000	9.7452
95	4-Chlorophenyl-phenylether	204	9.668	9.668	(1.054)	369535	10.0000	9.9546
96	4-Nitroaniline	138	9.684	9.684	(1.055)	128082	10.0000	9.3502
98	4,6-Dinitro-2-methylphenol	198	9.710	9.710	(0.919)	209674	20.0000	18.733
99	N-Nitrosodiphenylamine (1)	169	9.769	9.769	(0.925)	435317	10.0000	9.9284
100	1,2-Diphenylhydrazine	77	9.812	9.812	(0.929)	519741	10.0000	9.2330
106	4-Bromophenyl-phenylether	248	10.122	10.122	(0.958)	215597	10.0000	10.131
107	Hexachlorobenzene	284	10.207	10.207	(0.966)	207521	10.0000	10.402
210	Atrazine	200	10.239	10.239	(0.969)	183824	10.0000	10.936
227	n-Octadecane	57	10.378	10.378	(1.654)	262529	10.0000	9.0302
111	Pentachlorophenol	266	10.378	10.378	(0.982)	205184	20.0000	17.063
115	Phenanthrene	178	10.592	10.592	(1.003)	877398	10.0000	9.7044
116	Anthracene	178	10.640	10.640	(1.007)	887963	10.0000	9.9104
119	Carbazole	167	10.784	10.784	(1.021)	739520	10.0000	9.5360
120	Di-n-Butylphthalate	149	11.078	11.078	(1.049)	869892	10.0000	9.8421
123	Fluoranthene	202	11.911	11.911	(1.127)	994725	10.0000	9.9067
124	Benzidine	184	12.040	12.040	(0.850)	213815	10.0000	8.3394

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
125 Pyrene	202	12.216	12.216	(0.863)	970008	10.0000	9.9457
131 Butylbenzylphthalate	149	13.081	13.081	(0.924)	353230	10.0000	10.602
135 3,3'-Dichlorobenzidine	252	14.064	14.064	(0.993)	304991	10.0000	10.374
136 Benzo(a)Anthracene	228	14.144	14.144	(0.999)	852620	10.0000	9.6373
137 Chrysene	228	14.214	14.214	(1.004)	764578	10.0000	9.6539
139 bis(2-ethylhexyl)Phthalate	149	14.096	14.096	(0.995)	477672	10.0000	10.793
140 Di-n-octylphthalate	149	15.410	15.410	(0.900)	771385	10.0000	10.708
141 Benzo(b)fluoranthene	252	16.308	16.308	(0.953)	824632	10.0000	9.6544
142 Benzo(k)fluoranthene	252	16.372	16.372	(0.956)	797230	10.0000	9.3596
143 7,12-dimethylbenz[a]anthracen	256	16.297	16.297	(0.952)	340077	10.0000	9.3960
146 Benzo(a)pyrene	252	17.002	17.002	(0.993)	729837	10.0000	9.7003
149 Indeno(1,2,3-cd)pyrene	276	19.374	19.374	(1.132)	761511	10.0000	9.8303
150 Dibenz(a,h)anthracene	278	19.396	19.396	(1.133)	652088	10.0000	9.9896
151 Benzo(g,h,i)perylene	276	19.983	19.983	(1.167)	631136	10.0000	9.8073
$ 154 Nitrobenzene-d5	82	6.820	6.820	(0.907)	300804	10.0000	9.4332
$ 155 2-Fluorobiphenyl	172	8.530	8.530	(0.930)	731539	10.0000	9.8736
$ 156 Terphenyl-d14	244	12.376	12.376	(0.874)	729536	10.0000	10.032
$ 157 Phenol-d5	99	5.923	5.923	(0.944)	361982	10.0000	9.6837
$ 158 2-Fluorophenol	112	4.892	4.892	(0.780)	308106	10.0000	9.6842
$ 159 2,4,6-Tribromophenol	330	9.913	9.913	(0.938)	77585	10.0000	10.937

QC Flag Legend

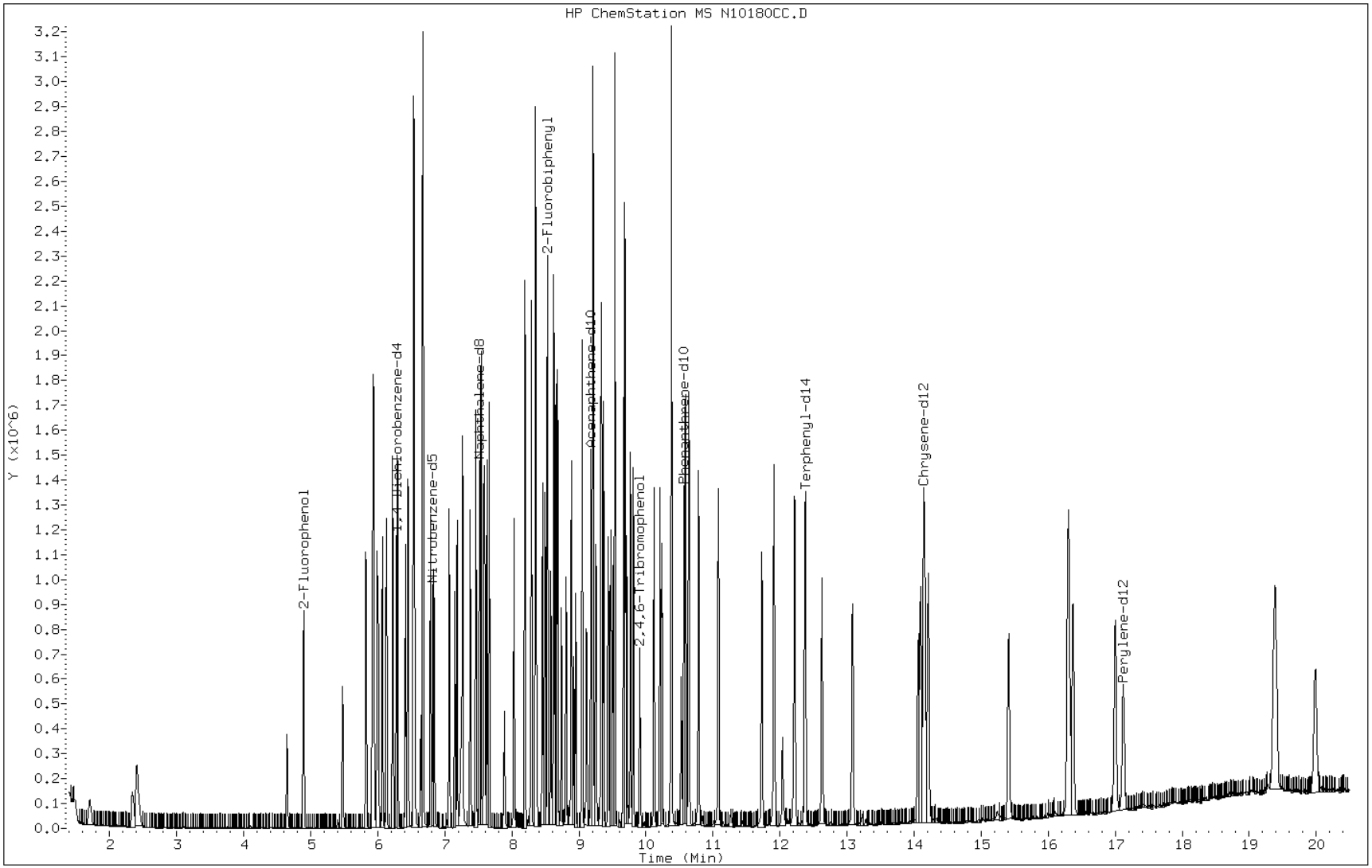
M - Compound response manually integrated.

Data File: N10180CC.D

Date: 18-OCT-2013 11:31

Client ID: Instrument: 733.i

Sample Info: CCVIS 984622 Operator: 3200



Manual Integration Report

Data File: N10180CC.D
Inj. Date and Time: 18-OCT-2013 11:31
Instrument ID: 733.i
Client ID:
Compound: 9 Pyridine
CAS #: 110-86-1
Report Date: 10/19/2013

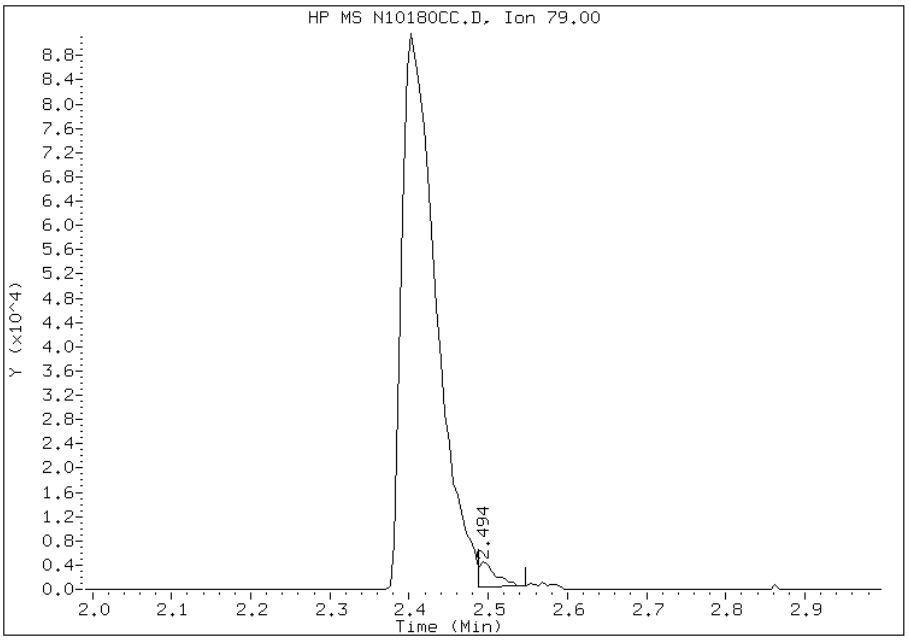
Processing Integration Results

RT: 2.49

Response: 6297

Amount: 0

Conc: 0



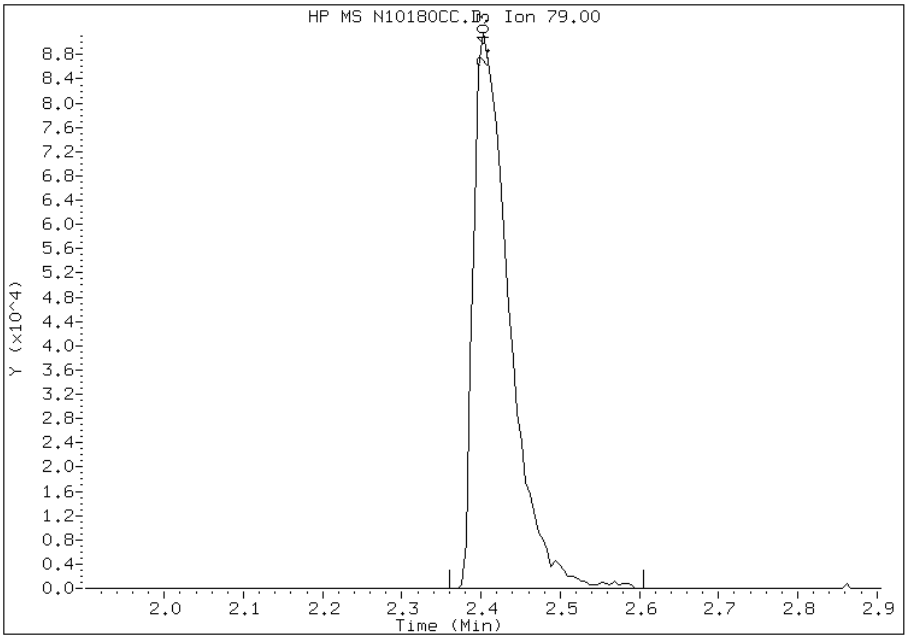
Manual Integration Results

RT: 2.40

Response: 286592

Amount: 10

Conc: 10



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 12:25
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N10180CC.D
Inj. Date and Time: 18-OCT-2013 11:31
Instrument ID: 733.i
Client ID:
Compound: 49 Benzoic Acid
CAS #: 65-85-0
Report Date: 10/19/2013

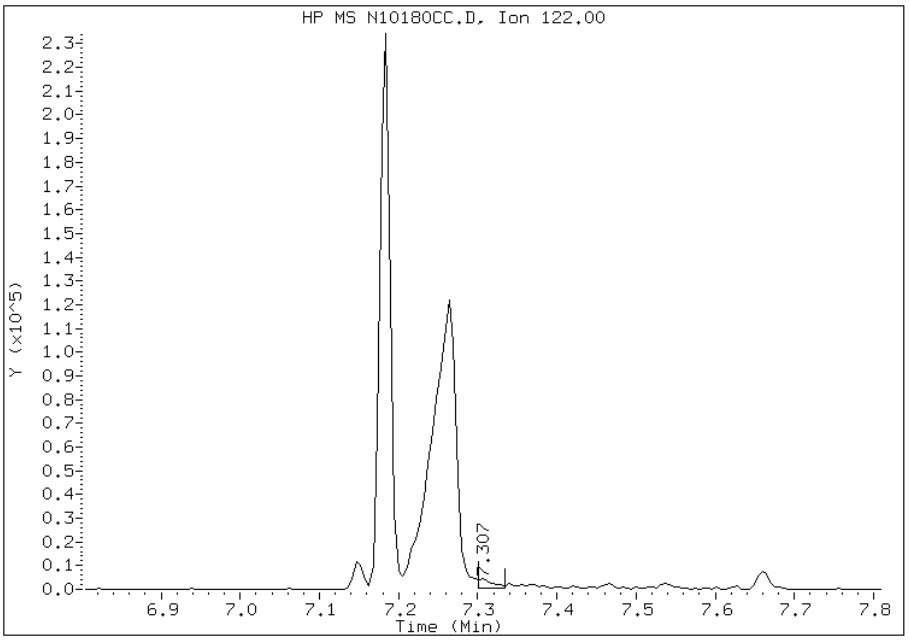
Processing Integration Results

RT: 7.31

Response: 5303

Amount: 5

Conc: 5



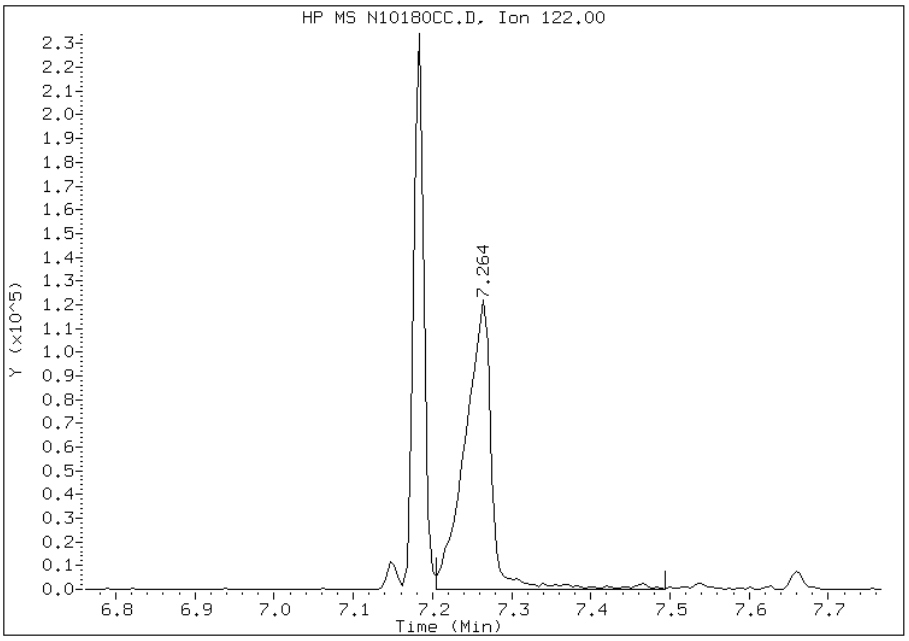
Manual Integration Results

RT: 7.26

Response: 281922

Amount: 22

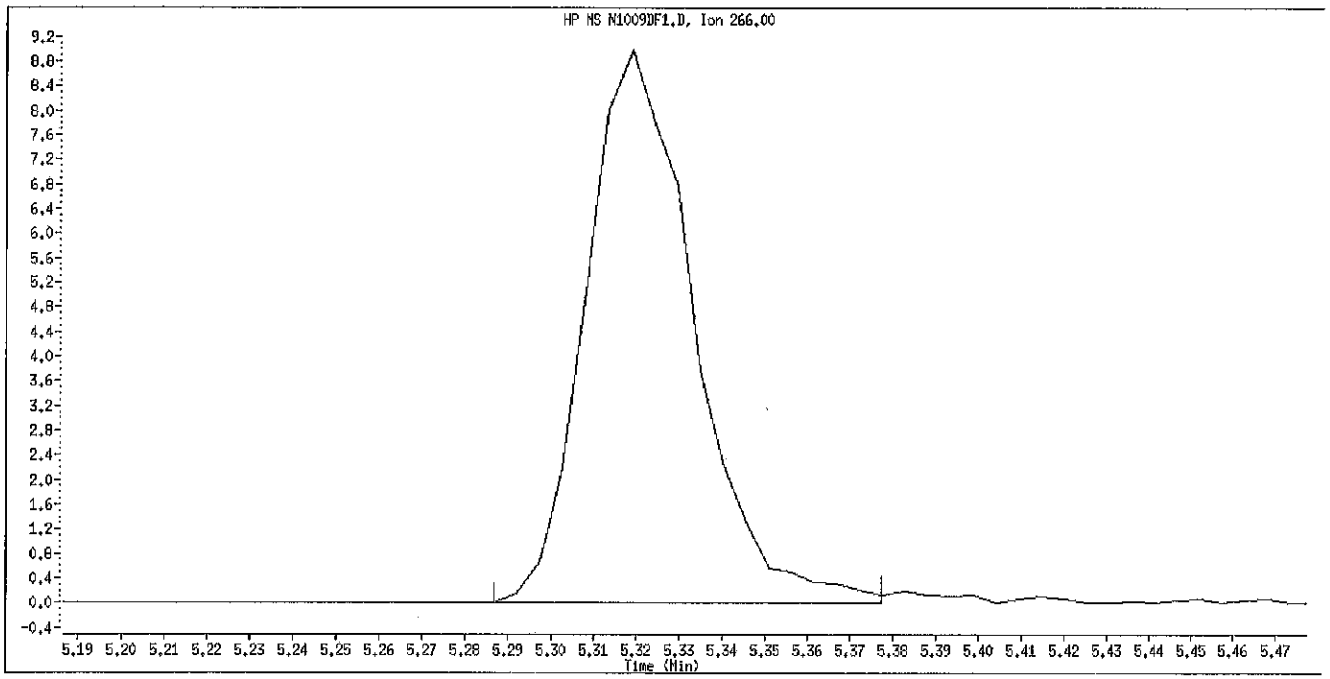
Conc: 22

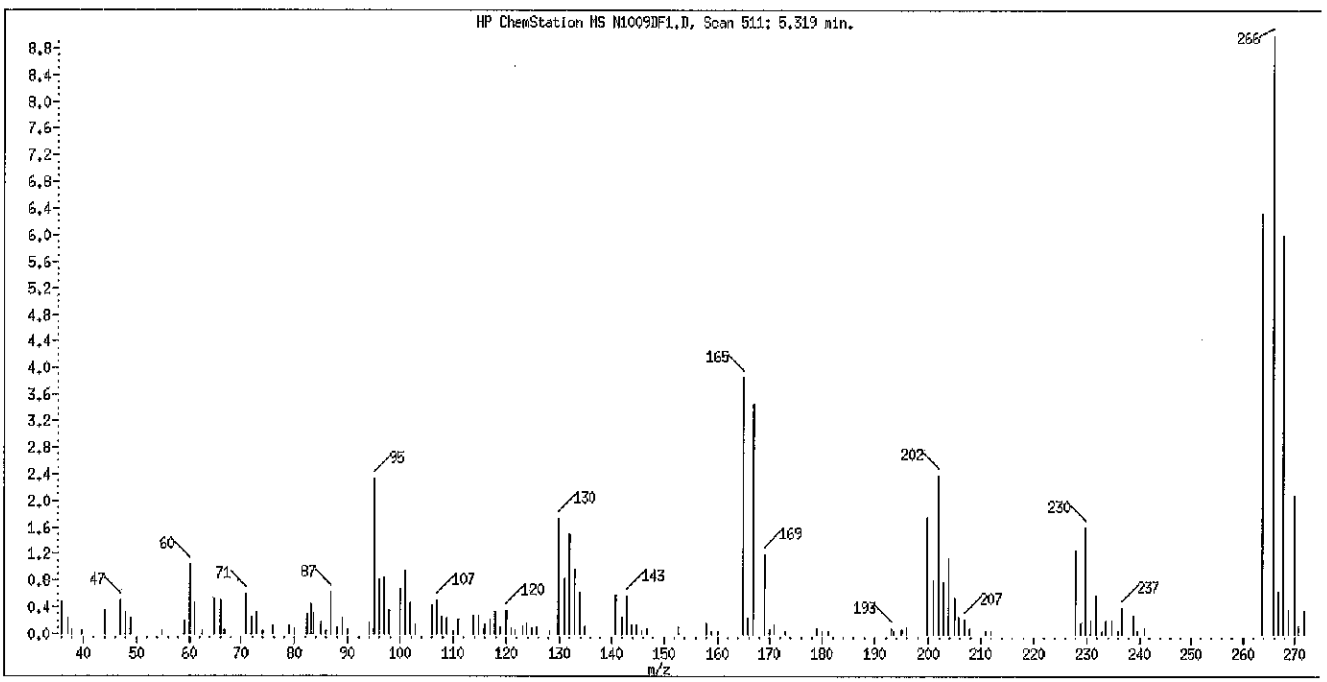


Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 12:25
Manual Integration Reason: Poor Chromatography

Data File: N1009DF1.D
Inj Date: 09-OCT-2013 05:09
Instrument ID: 733.i
Compound Name: Pentachlorophenol
Operator Name: 3200
Report Date: 10/09/2013

TAILING FACTOR

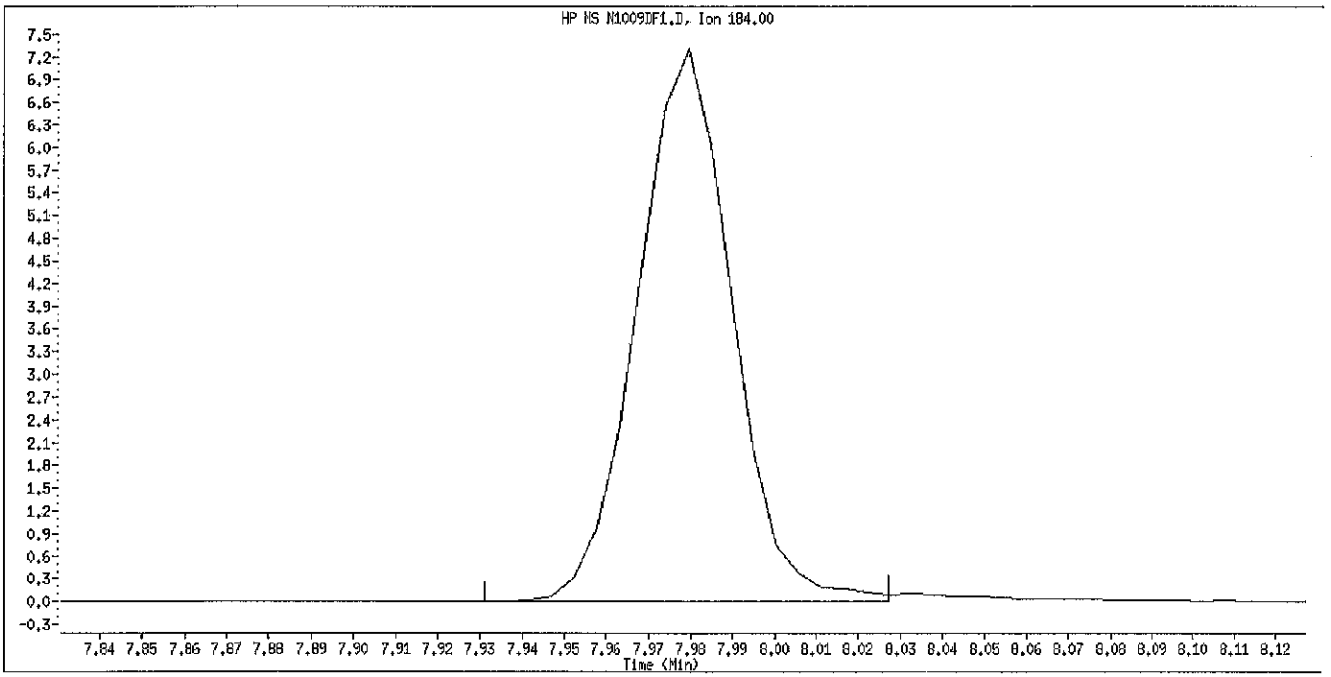


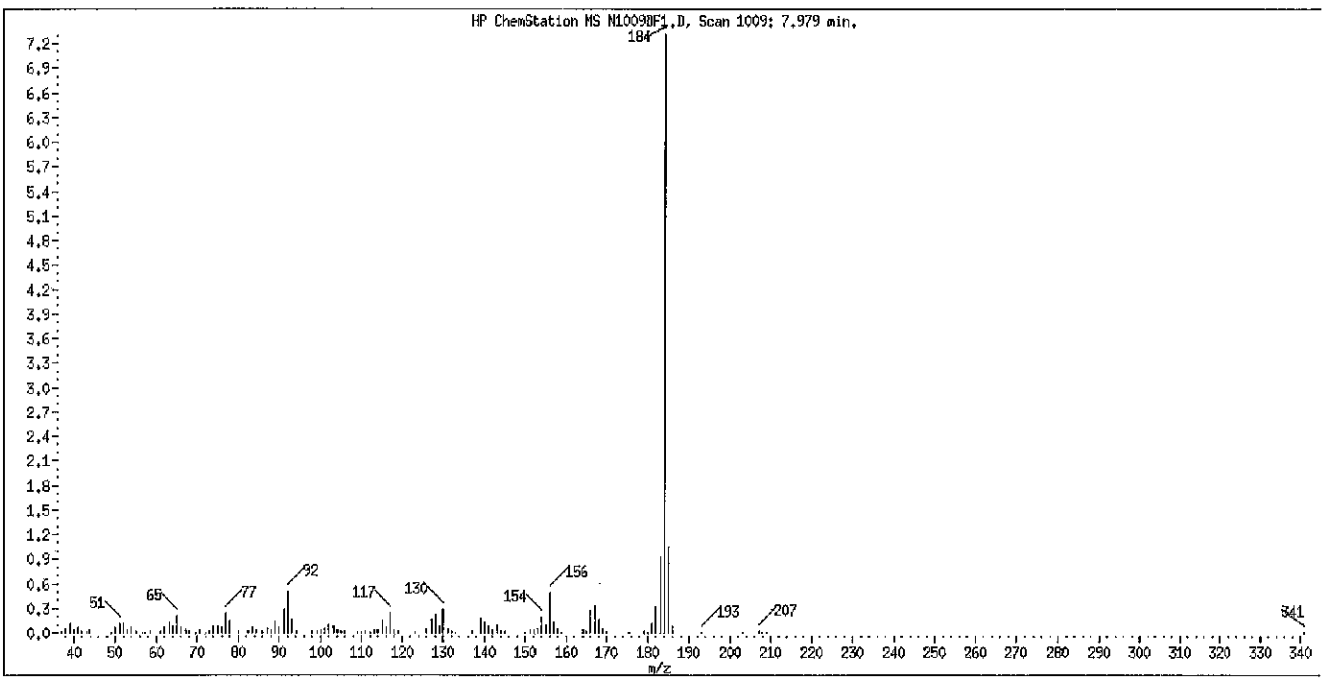


Tailing Factor = 1.45 Good
Acceptance Criteria 0 - 2
Tailing Factor = (T3 - T2) / (T2 - T1)
T1 = 5.29812 T2 = 5.3187 T3 = 5.348543

Data File: N1009DF1.D
Inj Date: 09-OCT-2013 05:09
Instrument ID: 733.i
Compound Name: Benzidine
Operator Name: 3200
Report Date: 10/09/2013

TAILING FACTOR

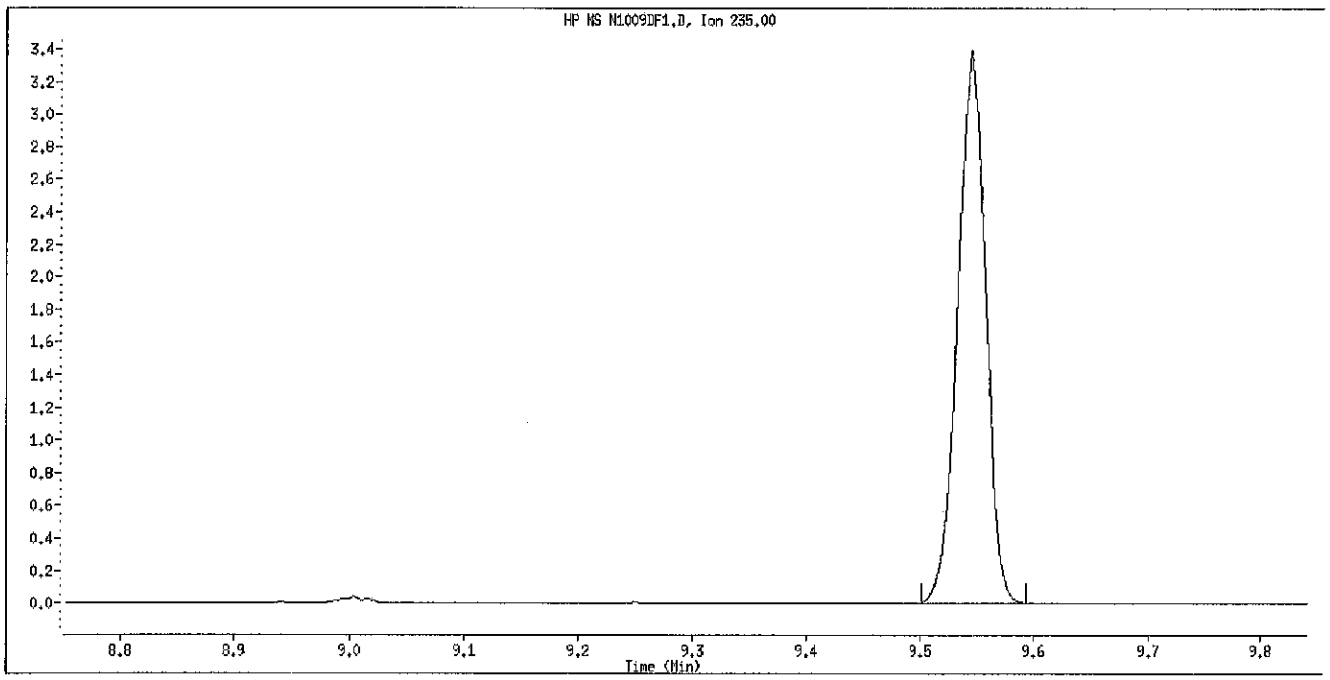




Tailing Factor = 0.922 Good
Acceptance Criteria 0 - 2
Tailing Factor = (T3 - T2) / (T2 - T1)
T1 = 7.955701 T2 = 7.9791 T3 = 8.000664

Data File: N1009DF1.D
Inj Date: 09-OCT-2013 05:09
Instrument ID: 733.i
Compound Name: 4,4'-DDT
Operator Name: 3200
Report Date: 10/09/2013

DEGRADATION REPORT



Degradation = 0.0773% Good
Acceptance Criteria 0 - 20 %
DDT Area = 584418
DDE Area = 452
DDD Area = 0

TestAmerica Pittsburgh

Data file : \\PITSVR06\D\chem\733.i\TN100913D.b\N1009DF1.D
Lab Smp Id: DFTPP 925020 Client Smp ID: DFTPP050
Inj Date : 09-OCT-2013 05:09
Operator : 3200 Inst ID: 733.i
Smp Info : DFTPP 925020
Misc Info : TN100913D.b,T8270Dtun.m
Comment :
Method : \\PITSVR06\D\chem\733.i\TN100913D.b\T8270Dtun.m
Meth Date : 18-Jan-2013 12:41 Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-502

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

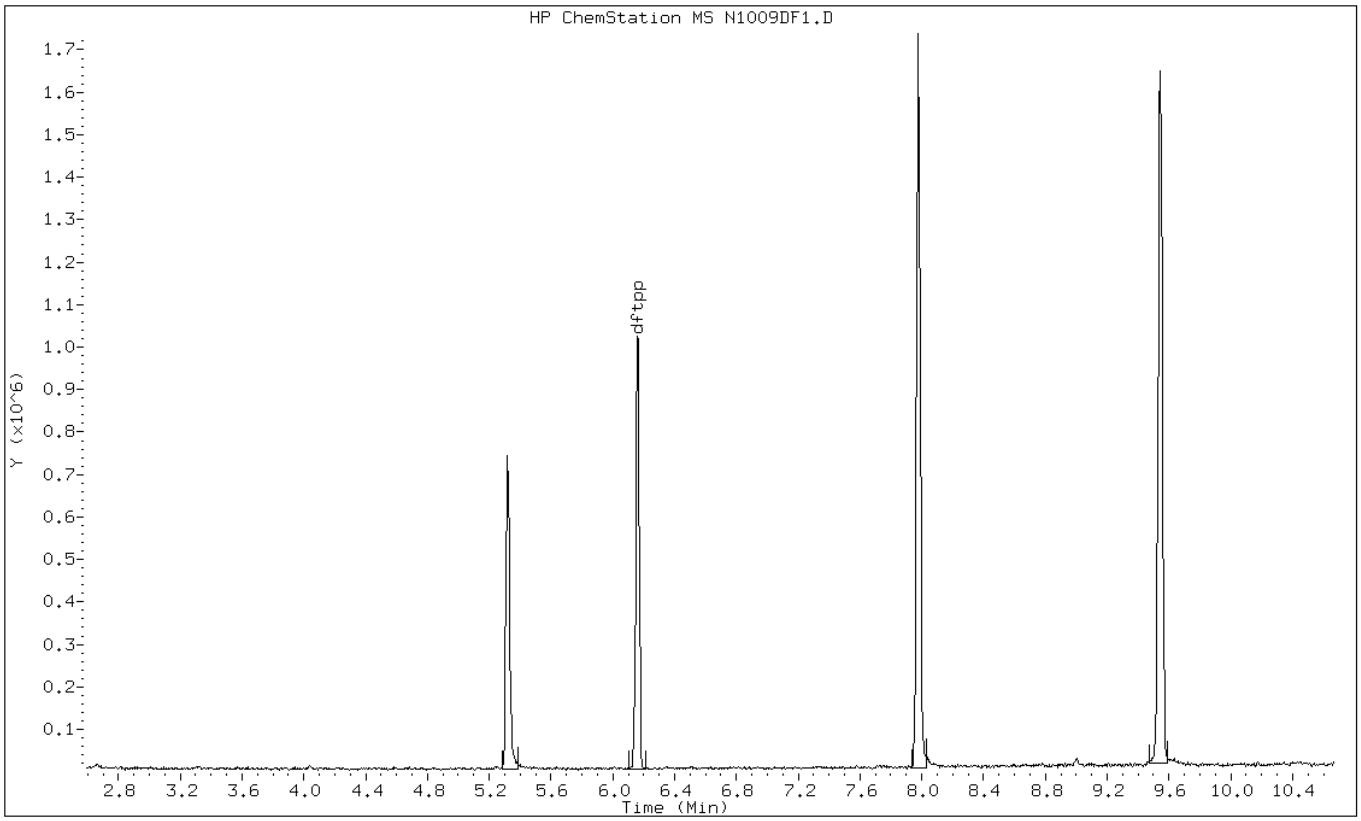
					CONCENTRATIONS ON-COL (ug/L)	FINAL (ng)		
RT	EXP RT	REL RT	MASS	RESPONSE			TARGET RANGE	RATIO
1 dftpp							CAS #: 5074-71-5	
6.157	6.100	(0.000)	198	108104			0.00- 100.00	100.00
6.157	6.100	(0.000)	51	39008			30.00- 60.00	36.08
6.157	6.100	(0.000)	68	0	0.0	0.0	0.00- 2.00	0.00
6.157	6.100	(0.000)	69	44784			0.00- 0.00	41.43
6.157	6.100	(0.000)	70	512			0.00- 2.00	1.14
6.157	6.100	(0.000)	127	48576			40.00- 60.00	44.93
6.157	6.100	(0.000)	197	0	0.0	0.0	0.00- 1.00	0.00
6.157	6.100	(0.000)	199	8225			5.00- 9.00	7.61
6.157	6.100	(0.000)	275	26856			10.00- 30.00	24.84
6.157	6.100	(0.000)	365	3024			1.00- 0.00	2.80
6.157	6.100	(0.000)	441	8390			0.01- 99.99	68.62
6.157	6.100	(0.000)	442	61584			40.00- 0.00	56.97
6.157	6.100	(0.000)	443	12227			17.00- 23.00	19.85

Data File: N1009DF1.D

Date: 09-OCT-2013 05:09

Client ID: DFTPP050 Instrument: 733.i

Sample Info: DFTPP 925020 Operator: 3200



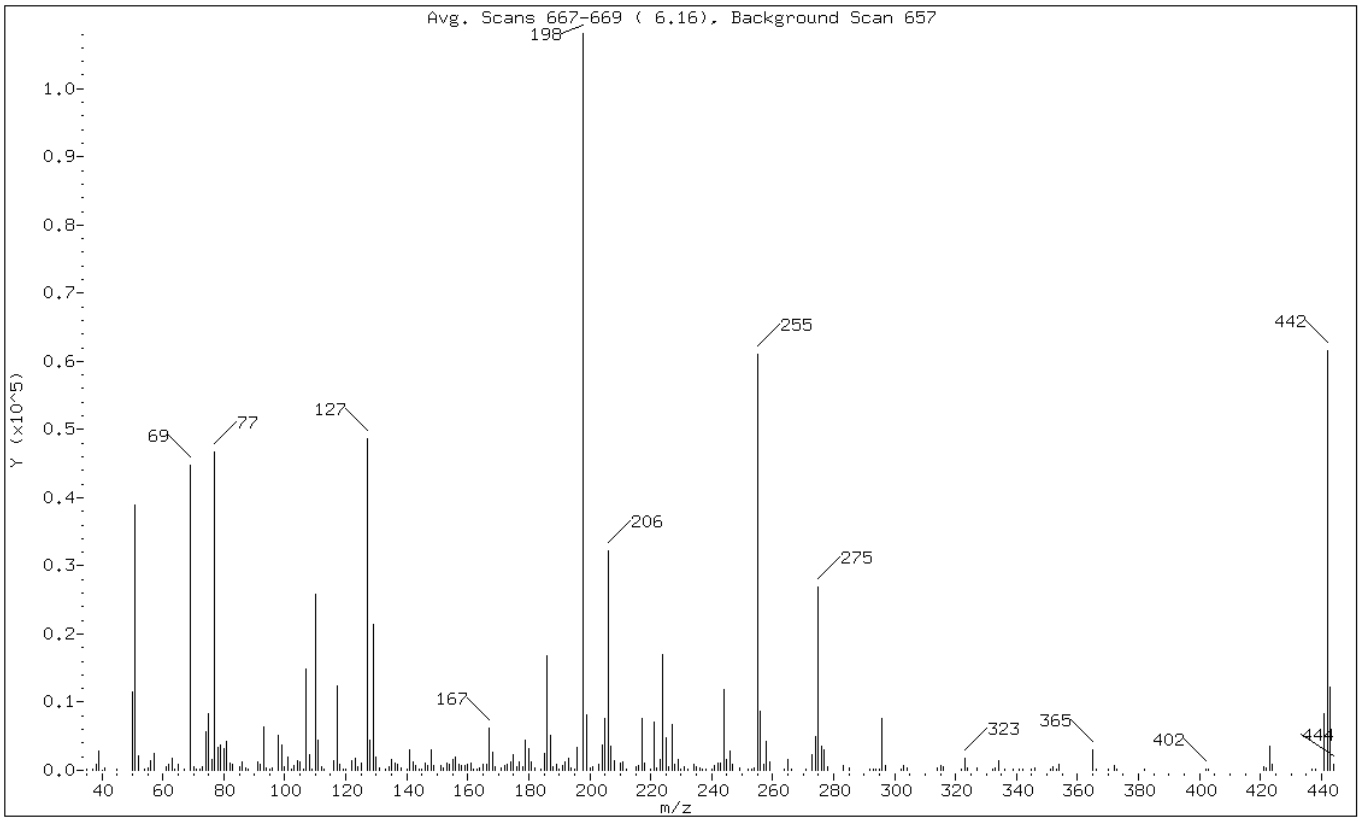
Data File: N1009DF1.D

Date: 09-OCT-2013 05:09

Client ID: DFTPP050 Instrument: 733.i

Sample Info: DFTPP 925020 Operator: 3200

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	36.08
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	41.43
70	Less than 2.00% of mass 69	0.47 (1.14)
127	40.00 - 60.00% of mass 198	44.93
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.61
275	10.00 - 30.00% of mass 198	24.84
365	Greater than 1.00% of mass 198	2.80
441	Present, but less than mass 443	7.76
442	Greater than 40.00% of mass 198	56.97
443	17.00 - 23.00% of mass 442	11.31 (19.85)

Data File: N1009DF1.D

Date: 09-OCT-2013 05:09

Client ID: DFTPP050 Instrument: 733.i

Sample Info: DFTPP 925020 Operator: 3200

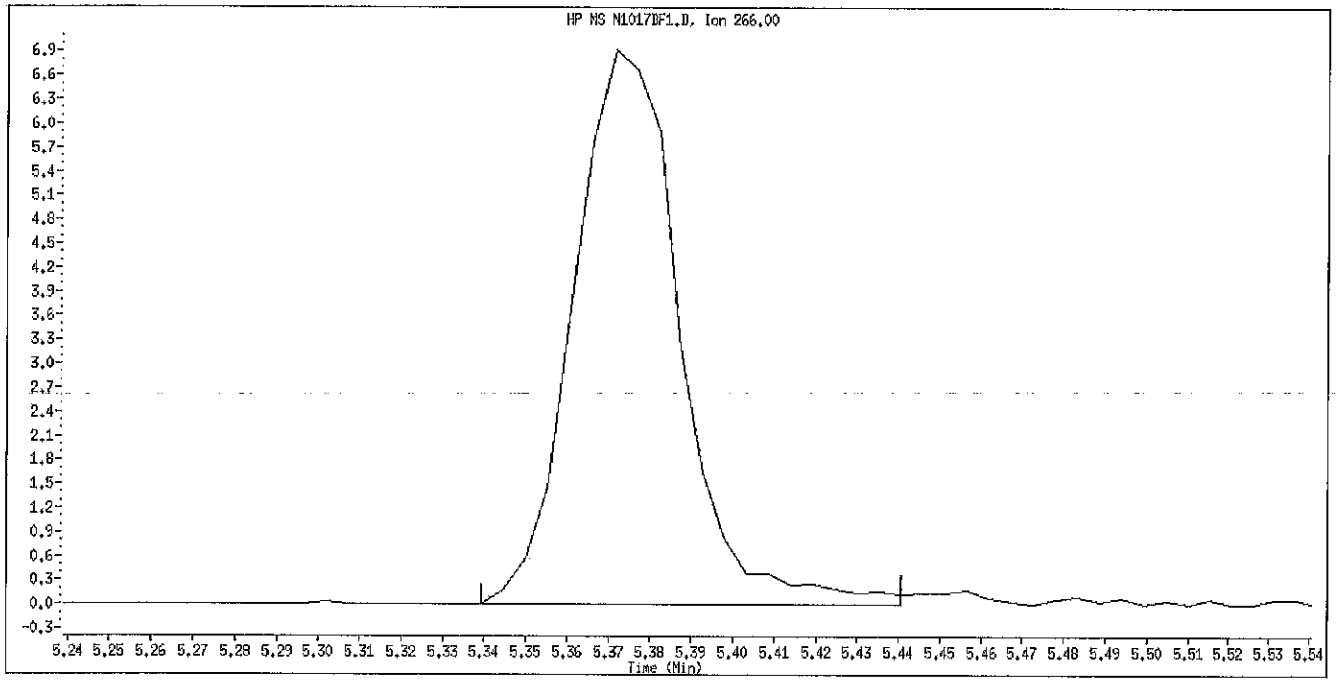
Data File: \\PITSVR06\D\chem\733.i\TN100913D.b\N1009DF1.D
Spectrum: Avg. Scans 667-669 (6.16), Background Scan 657
Location of Maximum: 198.00
Number of points: 246

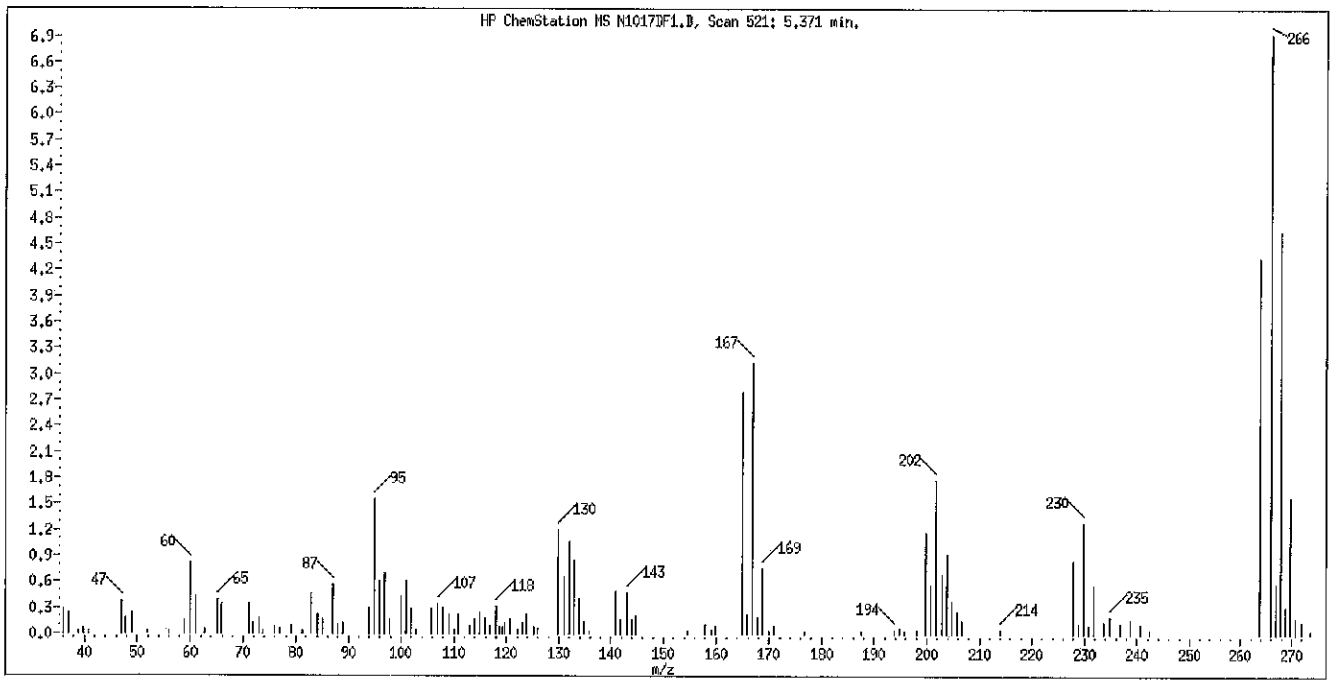
m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	104	117.00	12375	186.00	16728	259.00	1225
37.00	179	118.00	801	187.00	5114	264.00	139
38.00	953	119.00	112	188.00	607	265.00	1664
39.00	2755	120.00	128	189.00	868	266.00	265
40.00	87	122.00	1420	190.00	174	271.00	100
41.00	434	123.00	1691	191.00	704	273.00	2227
45.00	207	124.00	608	192.00	1171	274.00	5040
50.00	11580	125.00	1066	193.00	1769	275.00	26856
51.00	39008	127.00	48576	194.00	267	276.00	3566
52.00	2162	128.00	4489	195.00	104	277.00	2927
54.00	105	129.00	21424	196.00	3280	278.00	612
55.00	285	130.00	1971	198.00	108104	283.00	680
56.00	1351	131.00	334	199.00	8225	285.00	375
57.00	2520	133.00	160	200.00	354	292.00	173
61.00	502	134.00	562	201.00	578	293.00	260
62.00	866	135.00	1581	203.00	814	294.00	111
63.00	1751	136.00	991	204.00	3776	295.00	112
64.00	146	137.00	933	205.00	7661	296.00	7569
65.00	802	138.00	388	206.00	32192	297.00	742
67.00	141	140.00	170	207.00	3590	302.00	172
69.00	44784	141.00	3055	208.00	1374	303.00	713
70.00	512	142.00	1285	210.00	1067	304.00	309
71.00	125	143.00	758	211.00	1164	314.00	305
72.00	102	144.00	111	212.00	103	315.00	748
73.00	570	145.00	258	215.00	497	316.00	580
74.00	5688	146.00	1015	216.00	624	322.00	167
75.00	8312	147.00	780	217.00	7654	323.00	1778
76.00	1553	148.00	3052	218.00	985	324.00	290
77.00	46664	149.00	643	220.00	109	327.00	434
78.00	3379	151.00	753	221.00	7021	332.00	141
79.00	3684	152.00	316	222.00	428	333.00	410
80.00	3197	153.00	1068	223.00	1666	334.00	1465
81.00	4275	154.00	877	224.00	16944	336.00	150
82.00	1038	155.00	1615	225.00	4734	339.00	123
83.00	850	156.00	2017	226.00	513	341.00	131
85.00	592	157.00	799	227.00	6662	342.00	108
86.00	1229	158.00	732	228.00	873	345.00	119
87.00	327	159.00	730	229.00	1630	346.00	287
88.00	177	160.00	895	230.00	135	351.00	218
91.00	1157	161.00	1115	231.00	612	352.00	577

92.00	892	162.00	261	232.00	114	353.00	175
93.00	6370	163.00	200	234.00	825	354.00	907
94.00	394	164.00	348	235.00	499	365.00	3024
95.00	114	165.00	924	236.00	394	366.00	143
96.00	307	166.00	929	237.00	218	370.00	126
98.00	5154	167.00	6195	238.00	147	372.00	746
99.00	3684	168.00	2584	240.00	114	373.00	170
100.00	547	169.00	448	241.00	781	382.00	140
101.00	2034	171.00	331	242.00	981	402.00	238
102.00	121	172.00	705	243.00	1066	403.00	214
103.00	689	173.00	954	244.00	11895	421.00	455
104.00	1402	174.00	1228	245.00	1634	422.00	318
105.00	1277	175.00	2245	246.00	2852	423.00	3595
106.00	142	176.00	613	247.00	971	424.00	869
107.00	14784	177.00	1213	249.00	315	437.00	236
108.00	2318	178.00	544	252.00	242	438.00	104
109.00	246	179.00	4443	253.00	196	441.00	8390
110.00	25872	180.00	3239	254.00	293	442.00	61584
111.00	4359	181.00	1245	255.00	61064	443.00	12227
112.00	499	182.00	321	256.00	8675	444.00	946
113.00	207	184.00	254	257.00	841		
116.00	1343	185.00	2483	258.00	4230		

Data File: N1017DF1.D
Inj Date: 17-OCT-2013 10:57
Instrument ID: 733.i
Compound Name: Pentachlorophenol
Operator Name: 3200
Report Date: 10/18/2013

TAILING FACTOR

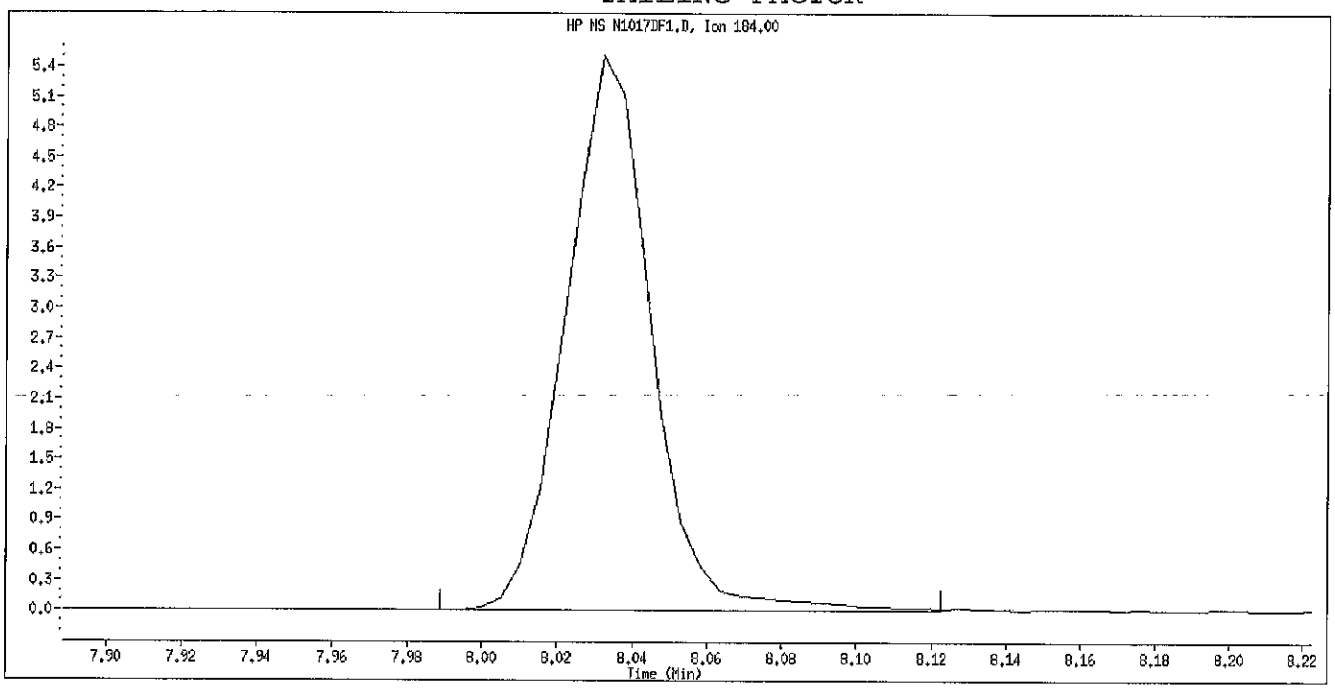


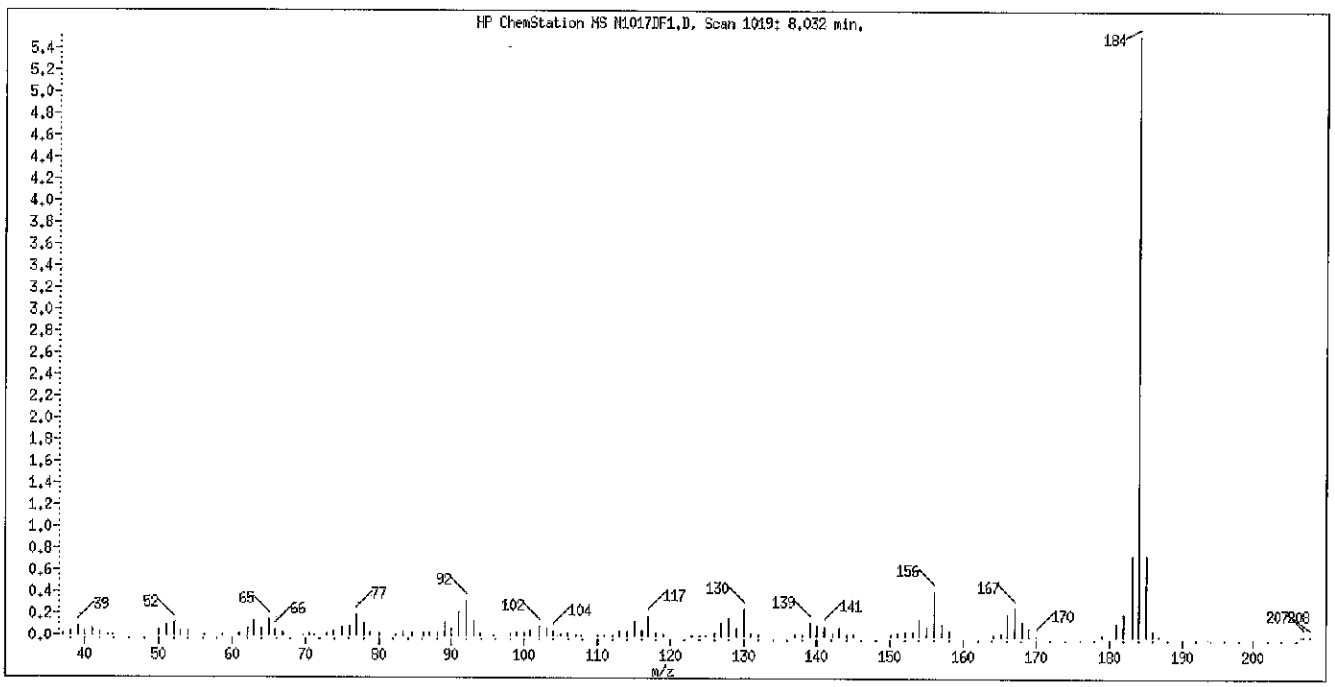


Tailing Factor = 1.38 Good
Acceptance Criteria 0 - 2
Tailing Factor = (T3 - T2) / (T2 - T1)
T1 = 5.350571 T2 = 5.371233 T3 = 5.399678

Data File: N1017DF1.D
Inj Date: 17-OCT-2013 10:57
Instrument ID: 733.i
Compound Name: Benzidine
Operator Name: 3200
Report Date: 10/18/2013

TAILING FACTOR

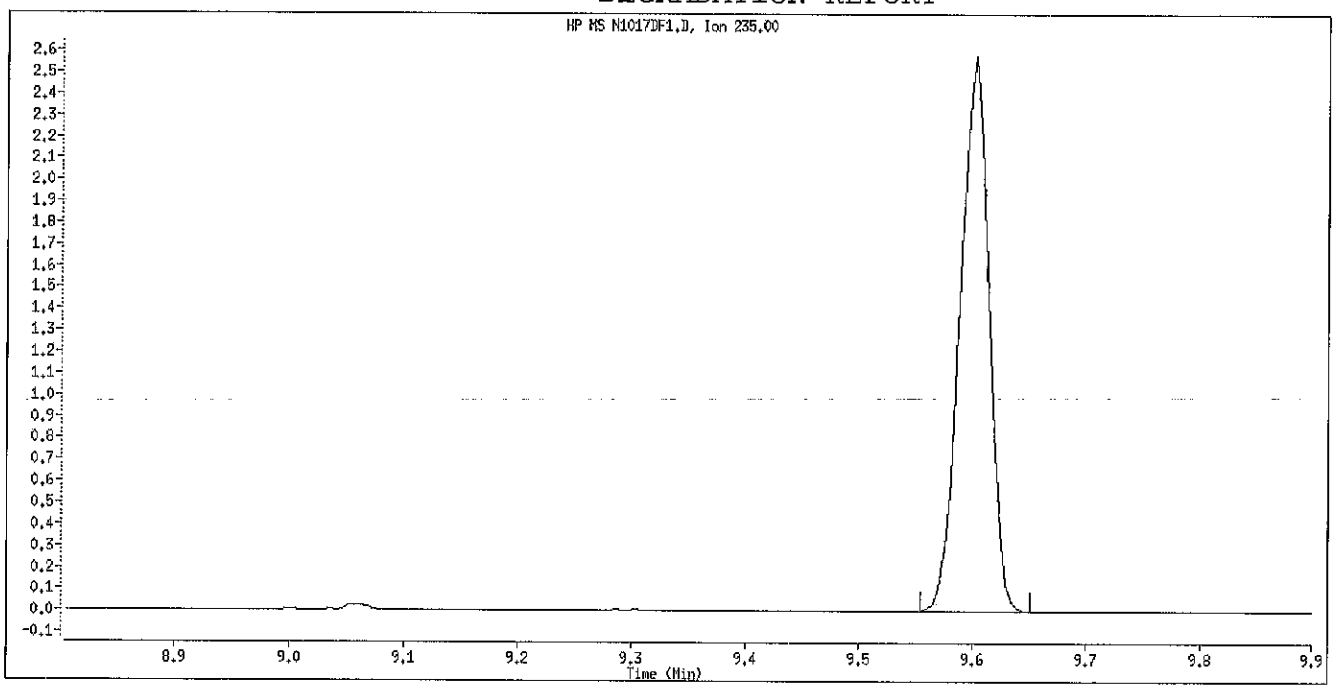




Tailing Factor = 1.23 Good
Acceptance Criteria 0 - 2
Tailing Factor = (T3 - T2) / (T2 - T1)
T1 = 8.010969 T2 = 8.0316 T3 = 8.056931

Data File: N1017DF1.D
Inj Date: 17-OCT-2013 10:57
Instrument ID: 733.i
Compound Name: 4,4'-DDT
Operator Name: 3200
Report Date: 10/18/2013

DEGRADATION REPORT



Degradation = 0.0568% Good
Acceptance Criteria 0 - 20 %
DDT Area = 457746
DDE Area = 260
DDD Area = 0

TestAmerica Pittsburgh

Data file : \\PITSVR06\D\chem\733.i\TN101713D.b\N1017DF1.D
Lab Smp Id: DFTPP 925020 Client Smp ID: DFTPP
Inj Date : 17-OCT-2013 10:57
Operator : 3200 Inst ID: 733.i
Smp Info : DFTPP 925020
Misc Info : TN101713D.b,T8270Dtun.m
Comment :
Method : \\PITSVR06\D\chem\733.i\TN101713D.b\T8270Dtun.m
Meth Date : 18-Jan-2013 12:41 Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-502

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

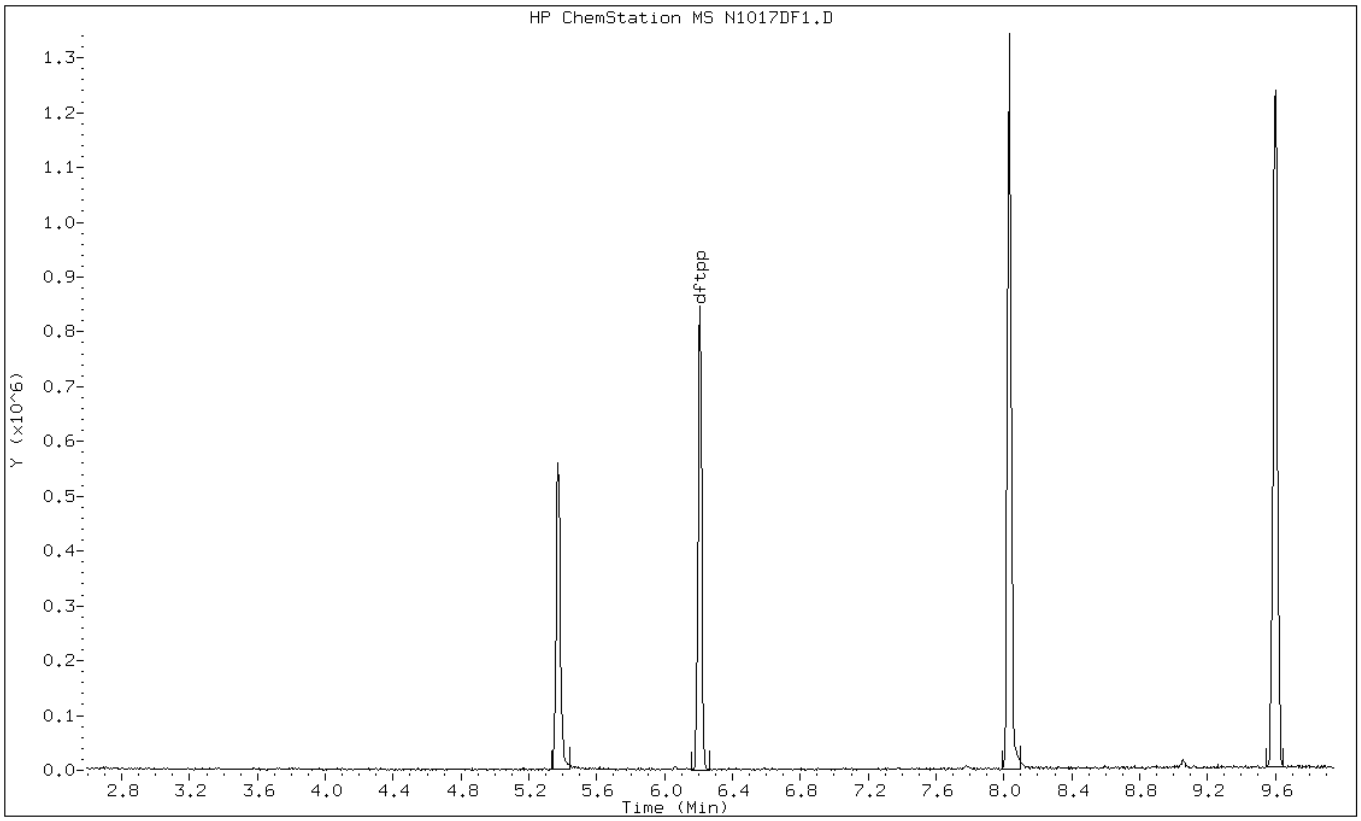
					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	REL RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 dftpp						CAS #: 5074-71-5		
6.209	6.100	(0.000)	198	87320			0.00- 100.00	100.00
6.209	6.100	(0.000)	51	30480			30.00- 60.00	34.91
6.209	6.100	(0.000)	68	614			0.00- 2.00	1.76
6.209	6.100	(0.000)	69	34896			0.00- 0.00	39.96
6.209	6.100	(0.000)	70	397			0.00- 2.00	1.14
6.209	6.100	(0.000)	127	38536			40.00- 60.00	44.13
6.209	6.100	(0.000)	197	0	0.0	0.0	0.00- 1.00	0.00
6.209	6.100	(0.000)	199	6733			5.00- 9.00	7.71
6.209	6.100	(0.000)	275	23416			10.00- 30.00	26.82
6.209	6.100	(0.000)	365	2894			1.00- 0.00	3.31
6.209	6.100	(0.000)	441	5337			0.01- 99.99	51.63
6.209	6.100	(0.000)	442	52848			40.00- 0.00	60.52
6.209	6.100	(0.000)	443	10337			17.00- 23.00	19.56

Data File: N1017DF1.D

Date: 17-OCT-2013 10:57

Client ID: DFTPP Instrument: 733.i

Sample Info: DFTPP 925020 Operator: 3200



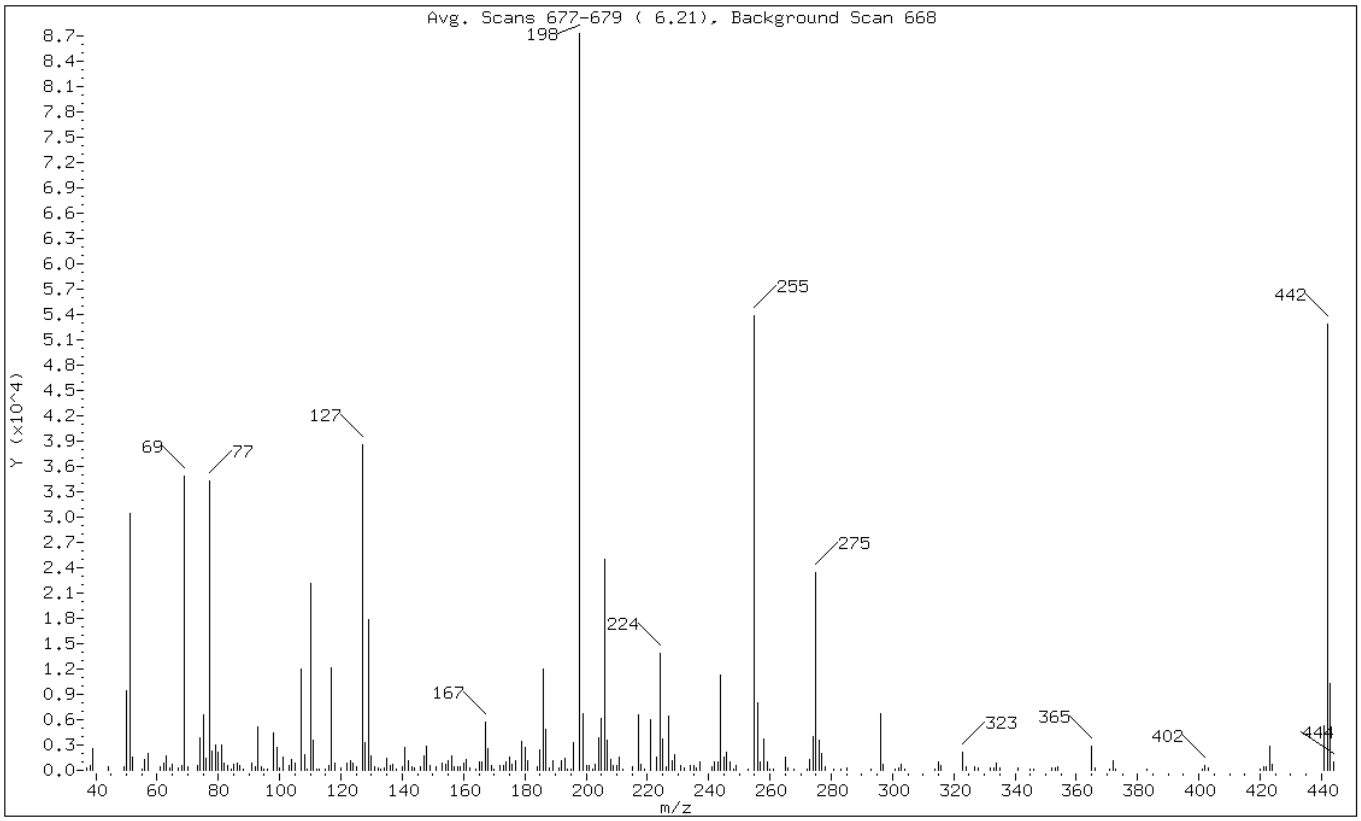
Data File: N1017DF1.D

Date: 17-OCT-2013 10:57

Client ID: DFTPP Instrument: 733.i

Sample Info: DFTPP 925020 Operator: 3200

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	34.91
68	Less than 2.00% of mass 69	0.70 (1.76)
69	Mass 69 relative abundance	39.96
70	Less than 2.00% of mass 69	0.45 (1.14)
127	40.00 - 60.00% of mass 198	44.13
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.71
275	10.00 - 30.00% of mass 198	26.82
365	Greater than 1.00% of mass 198	3.31
441	Present, but less than mass 443	6.11
442	Greater than 40.00% of mass 198	60.52
443	17.00 - 23.00% of mass 442	11.84 (19.56)

Data File: N1017DF1.D

Date: 17-OCT-2013 10:57

Client ID: DFTPP Instrument: 733.i

Sample Info: DFTPP 925020 Operator: 3200

Data File: \\PITSVR06\D\chem\733.i\TN101713D.b\N1017DF1.D
Spectrum: Avg. Scans 677-679 (6.21), Background Scan 668
Location of Maximum: 198.00
Number of points: 230

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	229	117.00	12112	187.00	4799	261.00	133
38.00	536	118.00	842	188.00	335	265.00	1524
39.00	2504	120.00	315	189.00	1141	266.00	244
44.00	437	122.00	923	191.00	309	268.00	100
49.00	407	123.00	1162	192.00	1093	272.00	117
50.00	9479	124.00	858	193.00	1416	273.00	1274
51.00	30480	125.00	412	194.00	191	274.00	4040
52.00	1598	127.00	38536	195.00	142	275.00	23416
55.00	142	128.00	3248	196.00	3286	276.00	3619
56.00	1251	129.00	17832	198.00	87320	277.00	1949
57.00	2003	130.00	1769	199.00	6733	278.00	497
61.00	491	131.00	389	200.00	568	281.00	103
62.00	790	132.00	231	201.00	561	283.00	101
63.00	1707	133.00	138	202.00	166	285.00	279
64.00	237	134.00	238	203.00	776	293.00	102
65.00	721	135.00	1390	204.00	3857	296.00	6775
67.00	218	136.00	544	205.00	6107	297.00	748
68.00	614	137.00	726	206.00	25040	301.00	108
69.00	34896	138.00	146	207.00	3552	302.00	294
70.00	397	140.00	392	208.00	1260	303.00	677
73.00	641	141.00	2665	209.00	612	304.00	106
74.00	3841	142.00	1187	210.00	597	314.00	114
75.00	6537	143.00	441	211.00	1573	315.00	943
76.00	1473	144.00	267	212.00	122	316.00	539
77.00	34328	146.00	418	215.00	470	323.00	2083
78.00	2288	147.00	1665	217.00	6567	324.00	388
79.00	3001	148.00	2914	218.00	777	327.00	473
80.00	2148	149.00	595	219.00	100	328.00	229
81.00	2955	151.00	387	221.00	5971	332.00	257
82.00	852	153.00	836	223.00	1619	333.00	320
83.00	598	154.00	653	224.00	13822	334.00	877
84.00	178	155.00	1099	225.00	3735	335.00	353
85.00	708	156.00	1663	226.00	449	341.00	263
86.00	868	157.00	368	227.00	6449	345.00	182
87.00	502	158.00	409	228.00	1128	346.00	191
88.00	117	159.00	419	229.00	1794	352.00	326
91.00	898	160.00	832	231.00	616	353.00	245
92.00	458	161.00	1261	232.00	317	354.00	364
93.00	5108	162.00	253	234.00	548	365.00	2894
94.00	442	164.00	101	235.00	622	366.00	224

95.00	158	165.00	1029	236.00	272	371.00	101
96.00	126	166.00	1046	237.00	953	372.00	1134
98.00	4464	167.00	5668	241.00	473	373.00	109
99.00	2752	168.00	2556	242.00	1058	383.00	112
100.00	309	169.00	538	243.00	1043	401.00	141
101.00	1512	170.00	127	244.00	11321	402.00	619
103.00	581	172.00	610	245.00	1587	403.00	241
104.00	1251	173.00	553	246.00	2159	420.00	111
105.00	915	174.00	1007	247.00	947	421.00	491
107.00	12072	175.00	1527	248.00	119	422.00	468
108.00	1838	176.00	753	249.00	577	423.00	2831
109.00	175	177.00	1083	253.00	102	424.00	686
110.00	22136	179.00	3424	255.00	53896	441.00	5337
111.00	3563	180.00	2760	256.00	7993	442.00	52848
112.00	154	181.00	1212	257.00	1010	443.00	10337
113.00	116	184.00	477	258.00	3745	444.00	1031
115.00	133	185.00	2436	259.00	994		
116.00	633	186.00	11999	260.00	137		

TestAmerica Pittsburgh

Data file : \\PITSVR06\D\chem\733.i\TN101813D.b\N1018DF1.D
Lab Smp Id: DFTPP 925020 Client Smp ID: DFTPP050
Inj Date : 18-OCT-2013 11:16
Operator : 3200 Inst ID: 733.i
Smp Info : DFTPP 925020
Misc Info : TN101813D.b,T8270Dtun.m
Comment :
Method : \\PITSVR06\D\chem\733.i\TN101813D.b\T8270Dtun.m
Meth Date : 18-Jan-2013 12:41 Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-502

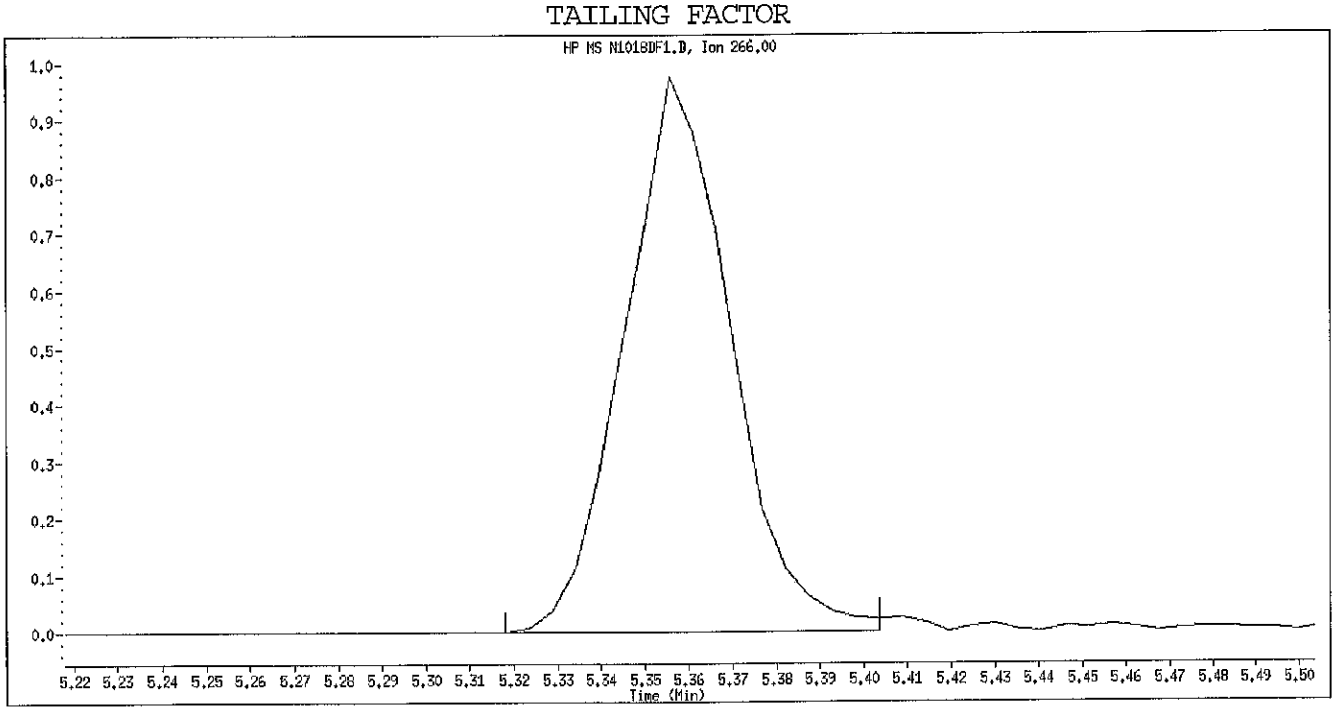
Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

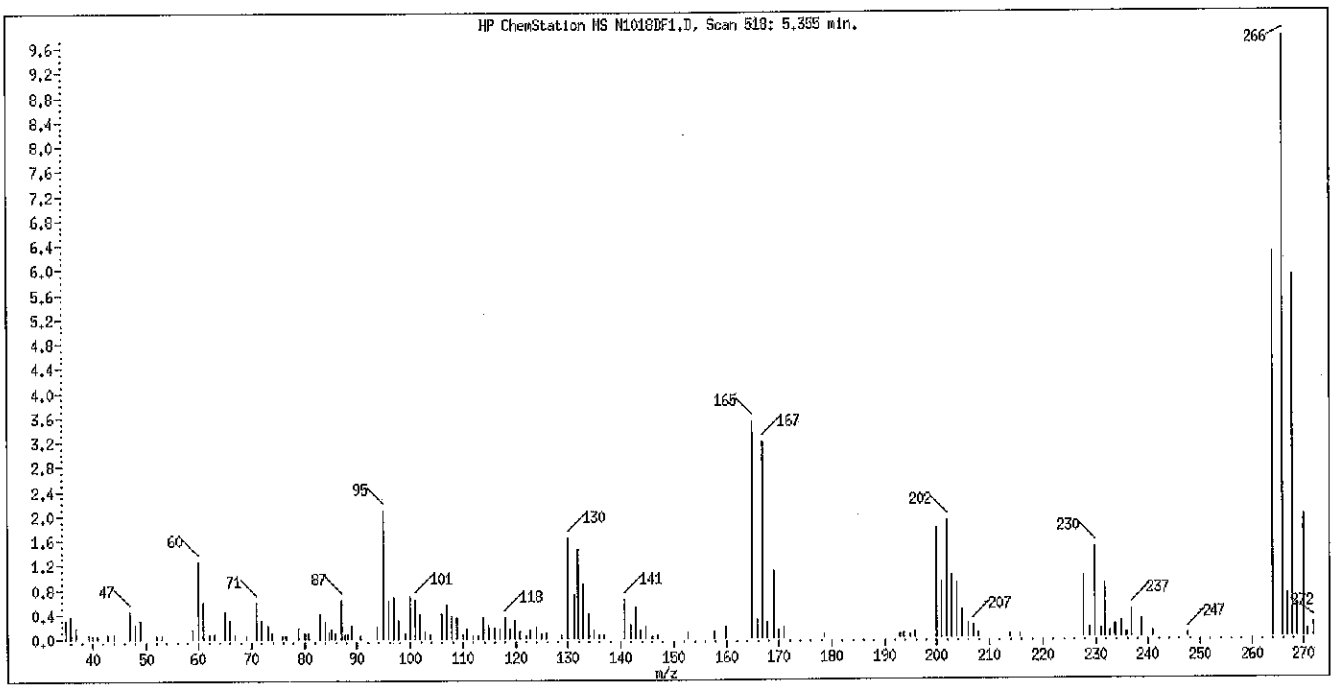
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ng)		
RT	EXP RT	REL RT	MASS	RESPONSE			TARGET RANGE	RATIO
1 dftpp							CAS #: 5074-71-5	
6.194	6.100	(0.000)	198	108136			0.00- 100.00	100.00
6.194	6.100	(0.000)	51	34776			30.00- 60.00	32.16
6.194	6.100	(0.000)	68	302			0.00- 2.00	0.72
6.194	6.100	(0.000)	69	42120			0.00- 0.00	38.95
6.194	6.100	(0.000)	70	330			0.00- 2.00	0.78
6.194	6.100	(0.000)	127	49472			40.00- 60.00	45.75
6.194	6.100	(0.000)	197	0	0.0	0.0	0.00- 1.00	0.00
6.194	6.100	(0.000)	199	7363			5.00- 9.00	6.81
6.194	6.100	(0.000)	275	26832			10.00- 30.00	24.81
6.194	6.100	(0.000)	365	2504			1.00- 0.00	2.32
6.194	6.100	(0.000)	441	11255			0.01- 99.99	82.05
6.194	6.100	(0.000)	442	65872			40.00- 0.00	60.92
6.194	6.100	(0.000)	443	13718			17.00- 23.00	20.83

Data File: N1018DF1.D
Inj Date: 18-OCT-2013 11:16
Instrument ID: 733.i
Compound Name: Pentachlorophenol
Operator Name: 3200
Report Date: 10/19/2013

TAILING FACTOR

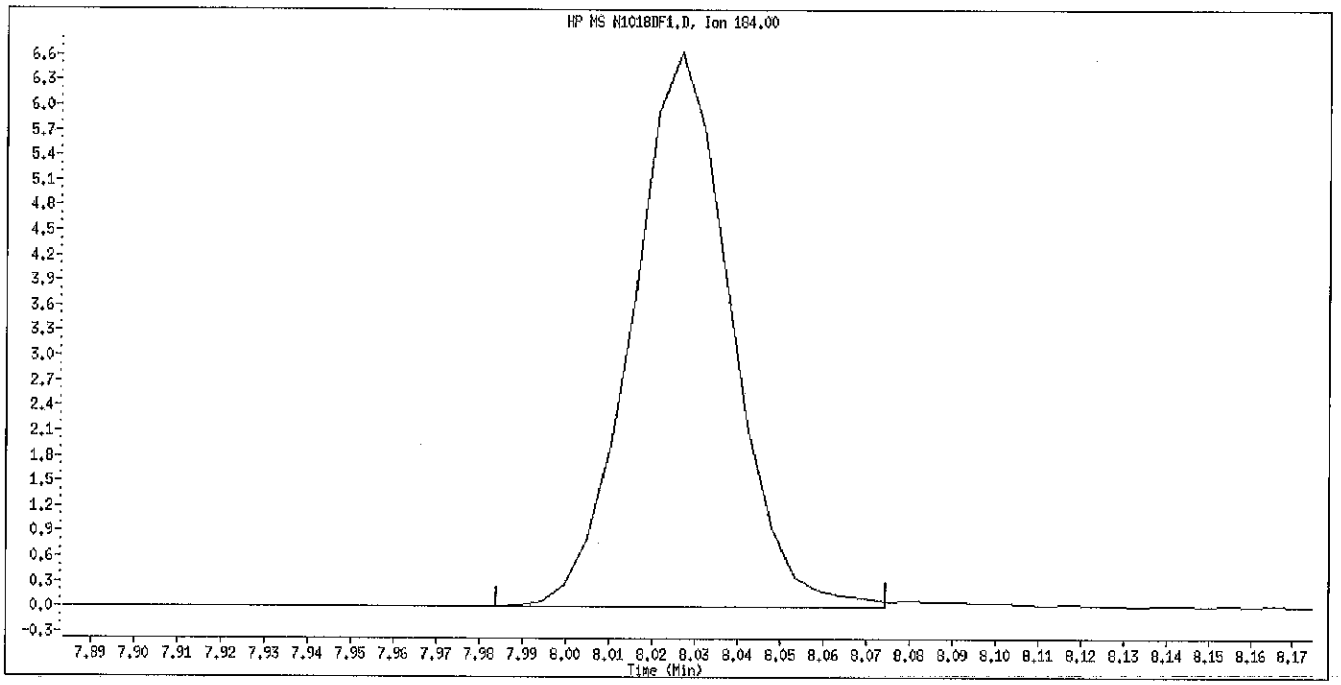


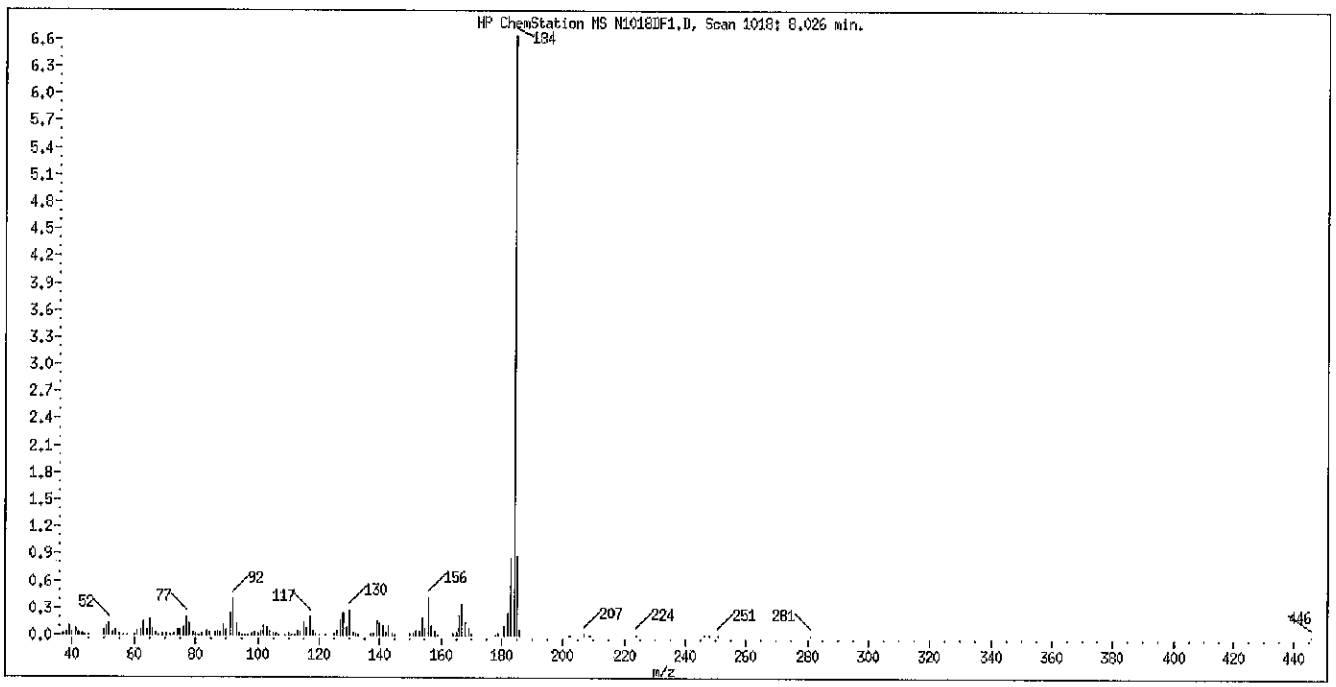


Tailing Factor = 1.26 Good
Acceptance Criteria 0 - 2
Tailing Factor = (T3 - T2) / (T2 - T1)
T1 = 5.332948 T2 = 5.355417 T3 = 5.383617

Data File: N1018DF1.D
Inj Date: 18-OCT-2013 11:16
Instrument ID: 733.i
Compound Name: Benzidine
Operator Name: 3200
Report Date: 10/19/2013

TAILING FACTOR

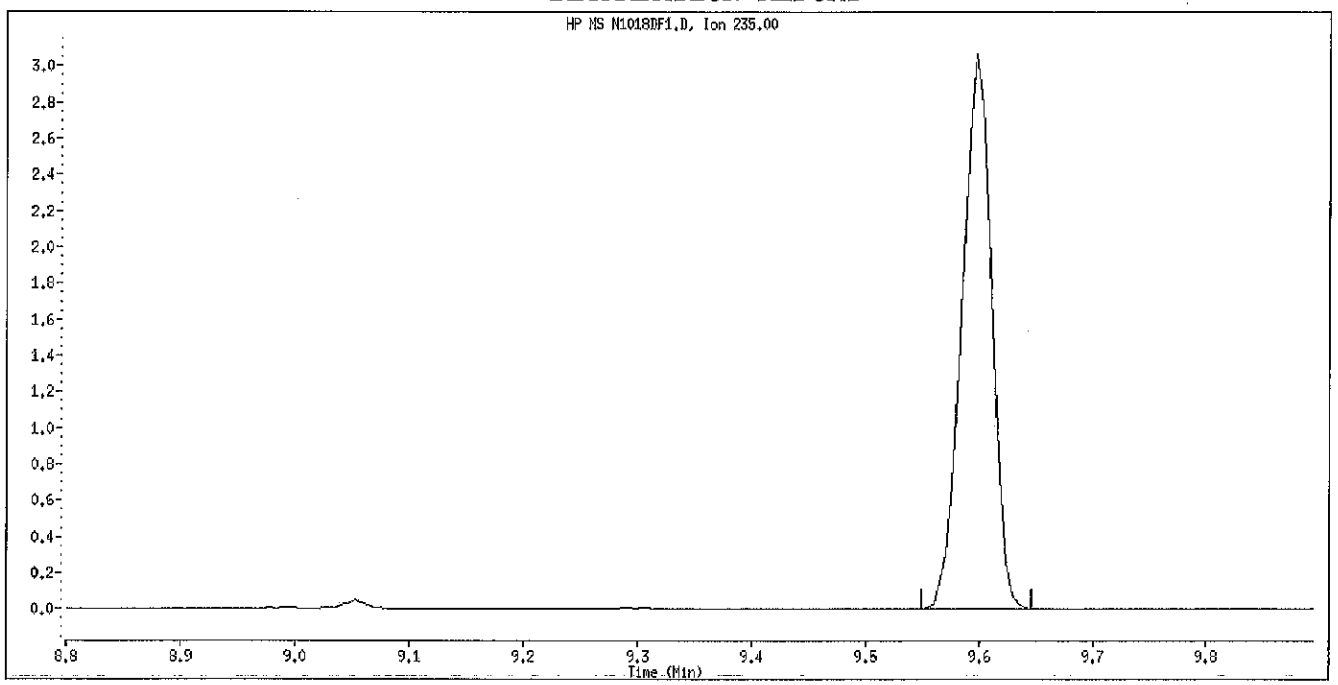




Tailing Factor = 1.05 Good
Acceptance Criteria 0 - 2
Tailing Factor = (T3 - T2) / (T2 - T1)
T1 = 8.003584 T2 = 8.026483 T3 = 8.050419

Data File: N1018DF1.D
Inj Date: 18-OCT-2013 11:16
Instrument ID: 733.i
Compound Name: 4,4'-DDT
Operator Name: 3200
Report Date: 10/19/2013

DEGRADATION REPORT



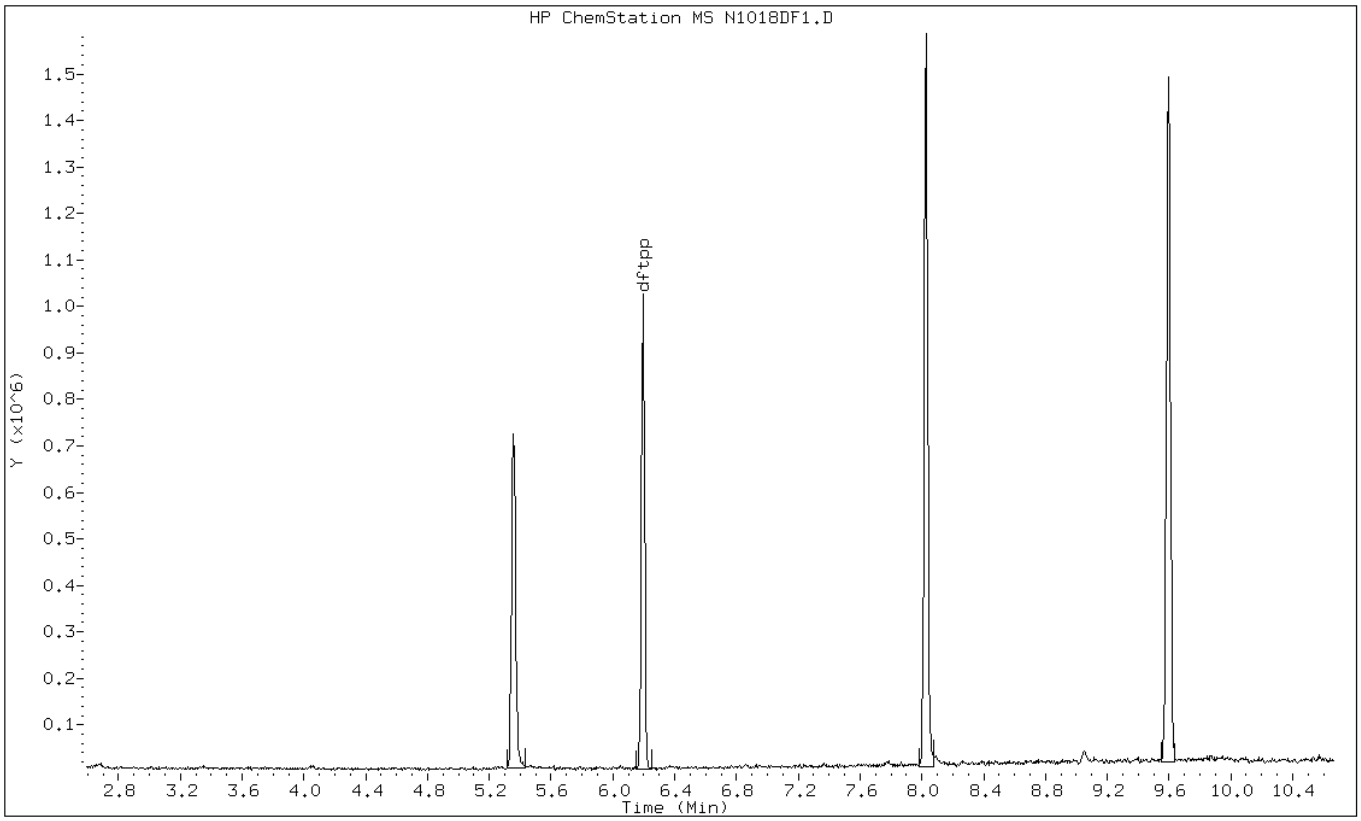
Degradation = 0.0219% Good
Acceptance Criteria 0 - 20 %
DDT Area = 561156
DDE Area = 123
DDD Area = 0

Data File: N1018DF1.D

Date: 18-OCT-2013 11:16

Client ID: DFTPP050 Instrument: 733.i

Sample Info: DFTPP 925020 Operator: 3200



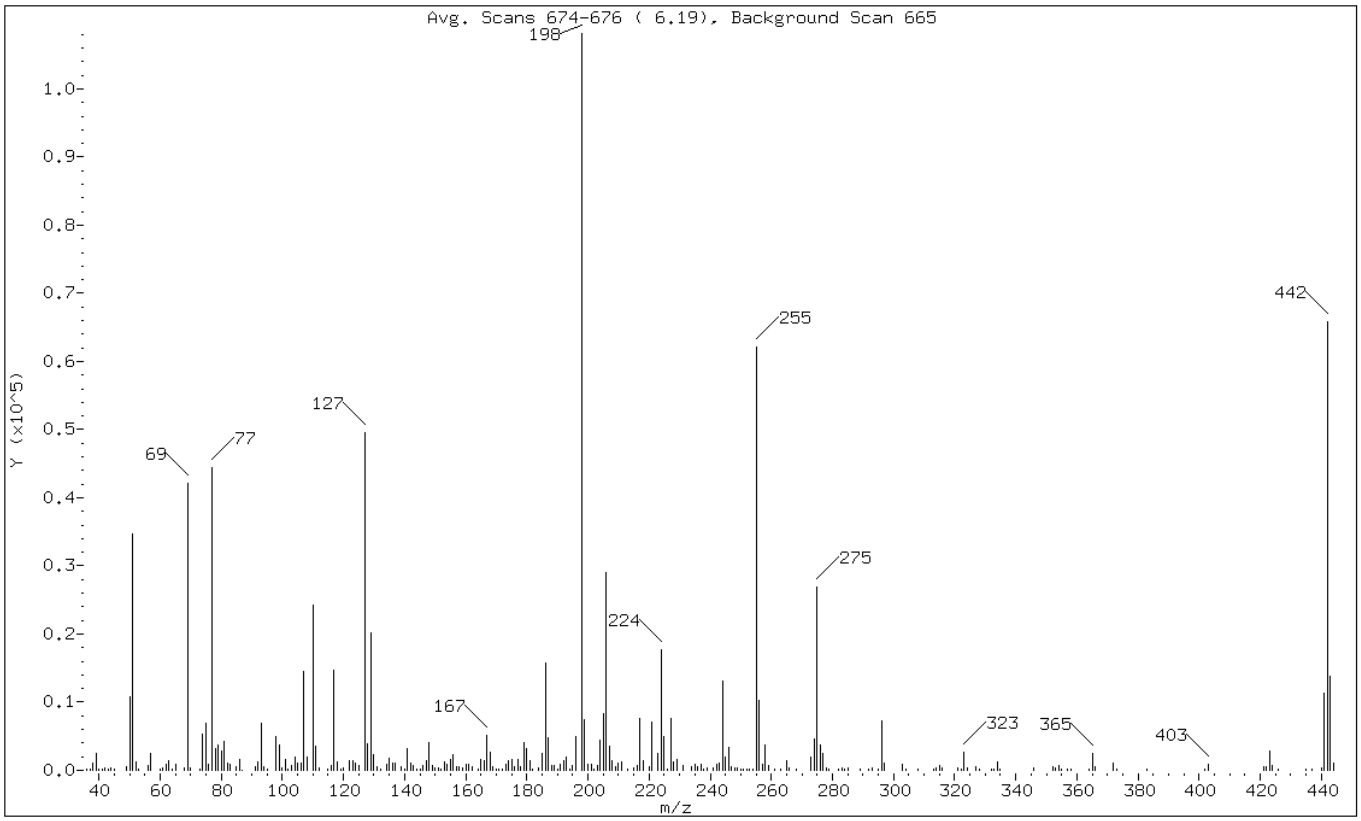
Data File: N1018DF1.D

Date: 18-OCT-2013 11:16

Client ID: DFTPP050 Instrument: 733.i

Sample Info: DFTPP 925020 Operator: 3200

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	32.16
68	Less than 2.00% of mass 69	0.28 (0.72)
69	Mass 69 relative abundance	38.95
70	Less than 2.00% of mass 69	0.31 (0.78)
127	40.00 - 60.00% of mass 198	45.75
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.81
275	10.00 - 30.00% of mass 198	24.81
365	Greater than 1.00% of mass 198	2.32
441	Present, but less than mass 443	10.41
442	Greater than 40.00% of mass 198	60.92
443	17.00 - 23.00% of mass 442	12.69 (20.83)

Data File: N1018DF1.D

Date: 18-OCT-2013 11:16

Client ID: DFTPP050 Instrument: 733.i

Sample Info: DFTPP 925020 Operator: 3200

Data File: \\PITSVR06\D\chem\733.i\TN101813D.b\N1018DF1.D
Spectrum: Avg. Scans 674-676 (6.19), Background Scan 665
Location of Maximum: 198.00
Number of points: 255

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	104	120.00	394	190.00	244	266.00	330
37.00	118	122.00	1476	191.00	822	268.00	110
38.00	988	123.00	1372	192.00	1411	273.00	1981
39.00	2526	124.00	1049	193.00	1859	274.00	4645
40.00	223	125.00	662	194.00	230	275.00	26832
41.00	132	127.00	49472	195.00	622	276.00	3726
42.00	286	128.00	3976	196.00	4921	277.00	2411
43.00	174	129.00	20232	198.00	108136	278.00	273
44.00	350	130.00	2332	199.00	7363	279.00	107
45.00	120	131.00	516	200.00	915	282.00	135
49.00	510	132.00	245	201.00	809	283.00	334
50.00	10741	134.00	855	202.00	187	284.00	255
51.00	34776	135.00	1821	203.00	734	285.00	383
52.00	1320	136.00	985	204.00	4477	289.00	135
53.00	140	137.00	1061	205.00	8240	292.00	157
56.00	765	139.00	461	206.00	29064	293.00	327
57.00	2478	140.00	187	207.00	3549	295.00	116
60.00	107	141.00	3211	208.00	1370	296.00	7231
61.00	350	142.00	1137	209.00	535	297.00	1069
62.00	970	143.00	719	210.00	1093	303.00	865
63.00	1401	144.00	131	211.00	1319	304.00	198
64.00	152	145.00	154	213.00	117	308.00	121
65.00	831	146.00	627	215.00	416	313.00	129
68.00	302	147.00	1398	216.00	784	314.00	384
69.00	42120	148.00	4022	217.00	7599	315.00	722
70.00	330	149.00	755	218.00	1414	316.00	291
73.00	243	150.00	275	220.00	569	321.00	272
74.00	5358	151.00	365	221.00	7116	322.00	192
75.00	6946	152.00	264	223.00	2399	323.00	2640
76.00	964	153.00	1171	224.00	17616	324.00	367
77.00	44440	154.00	822	225.00	4887	327.00	536
78.00	3191	155.00	1559	226.00	177	328.00	177
79.00	3640	156.00	2316	227.00	7657	332.00	118
80.00	2861	157.00	585	228.00	1311	333.00	120
81.00	4234	158.00	583	229.00	1551	334.00	1241
82.00	1064	159.00	298	231.00	637	335.00	183
83.00	921	160.00	838	234.00	445	346.00	339
85.00	573	161.00	911	235.00	798	352.00	605
86.00	1616	162.00	460	236.00	504	353.00	269
87.00	37	164.00	152	237.00	807	354.00	749

91.00	553	165.00	1659	238.00	170	355.00	127
92.00	1273	166.00	1336	239.00	405	357.00	115
93.00	6882	167.00	5080	241.00	276	358.00	103
94.00	484	168.00	2614	242.00	831	364.00	102
95.00	110	169.00	546	243.00	1075	365.00	2504
98.00	4949	170.00	148	244.00	13182	366.00	485
99.00	3702	171.00	129	245.00	1888	372.00	1097
100.00	309	172.00	252	246.00	3338	373.00	240
101.00	1631	173.00	847	247.00	504	383.00	150
102.00	223	174.00	1349	248.00	303	402.00	173
103.00	632	175.00	1607	249.00	433	403.00	850
104.00	1897	176.00	547	250.00	105	421.00	580
105.00	1062	177.00	1538	251.00	108	422.00	542
106.00	1002	178.00	480	252.00	124	423.00	2795
107.00	14516	179.00	4138	253.00	192	424.00	702
108.00	1864	180.00	3121	254.00	133	426.00	114
110.00	24272	181.00	1406	255.00	62088	435.00	106
111.00	3505	182.00	104	256.00	10300	437.00	106
112.00	414	184.00	383	257.00	855	440.00	273
115.00	146	185.00	2398	258.00	3650	441.00	11255
116.00	789	186.00	15786	259.00	701	442.00	65872
117.00	14633	187.00	4767	261.00	263	443.00	13718
118.00	1177	188.00	705	263.00	107	444.00	1143
119.00	214	189.00	759	265.00	1366		

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-86837/1-A

Matrix: Water | Lab File ID: N1017005.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1000(mL) | Date Analyzed: 10/17/2013 12:03

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND		2.0	0.14
208-96-8	Acenaphthylene	ND		2.0	0.15
120-12-7	Anthracene	ND		2.0	0.15
56-55-3	Benzo[a]anthracene	ND		2.0	0.15
50-32-8	Benzo[a]pyrene	ND		2.0	0.13
205-99-2	Benzo[b]fluoranthene	ND		2.0	0.16
191-24-2	Benzo[g,h,i]perylene	ND		2.0	0.15
207-08-9	Benzo[k]fluoranthene	ND		2.0	0.55
117-81-7	Bis(2-ethylhexyl) phthalate	ND		20	13
108-60-1	2,2'-oxybis[1-chloropropane]	ND		2.0	0.20
101-55-3	4-Bromophenyl phenyl ether	ND		10	0.64
85-68-7	Butyl benzyl phthalate	ND		10	1.4
86-74-8	Carbazole	ND		2.0	0.16
106-47-8	4-Chloroaniline	ND		10	0.89
91-58-7	2-Chloronaphthalene	ND		2.0	0.15
7005-72-3	4-Chlorophenyl phenyl ether	ND		10	0.50
218-01-9	Chrysene	ND		2.0	0.14
53-70-3	Dibenz(a,h)anthracene	ND		2.0	0.16
132-64-9	Dibenzofuran	ND		10	0.62
84-74-2	Di-n-butyl phthalate	ND		10	1.2
91-94-1	3,3'-Dichlorobenzidine	ND		10	1.1
84-66-2	Diethyl phthalate	ND		10	1.5
131-11-3	Dimethyl phthalate	ND		10	0.77
121-14-2	2,4-Dinitrotoluene	ND		10	0.54
606-20-2	2,6-Dinitrotoluene	ND		10	0.80
117-84-0	Di-n-octyl phthalate	ND		10	2.1
206-44-0	Fluoranthene	ND		2.0	0.16
86-73-7	Fluorene	ND		2.0	0.22
118-74-1	Hexachlorobenzene	ND		2.0	0.18
87-68-3	Hexachlorobutadiene	ND		2.0	0.17
77-47-4	Hexachlorocyclopentadiene	ND		10	0.52
67-72-1	Hexachloroethane	ND		10	0.63
193-39-5	Indeno[1,2,3-cd]pyrene	ND		2.0	0.20
78-59-1	Isophorone	ND		10	0.64

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-86837/1-A

Matrix: Water | Lab File ID: N1017005.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1000(mL) | Date Analyzed: 10/17/2013 12:03

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
91-57-6	2-Methylnaphthalene	ND		2.0	0.12
91-20-3	Naphthalene	ND		2.0	0.14
88-74-4	2-Nitroaniline	ND		50	3.5
99-09-2	3-Nitroaniline	ND		50	3.2
100-01-6	4-Nitroaniline	ND		50	1.7
100-02-7	4-Nitrophenol	ND		50	6.5
98-95-3	Nitrobenzene	ND		20	0.84
621-64-7	N-Nitrosodi-n-propylamine	ND		2.0	0.31
86-30-6	N-Nitrosodiphenylamine	ND		10	0.85
85-01-8	Phenanthrene	ND		2.0	0.43
129-00-0	Pyrene	ND		2.0	0.16
59-50-7	4-Chloro-3-methylphenol	ND		10	0.75
95-57-8	2-Chlorophenol	ND		10	1.7
95-48-7	2-Methylphenol	ND		10	0.86
106-44-5	Methylphenol, 3 & 4	ND		10	0.90
120-83-2	2,4-Dichlorophenol	ND		2.0	0.33
105-67-9	2,4-Dimethylphenol	ND		10	0.85
51-28-5	2,4-Dinitrophenol	ND		50	6.1
534-52-1	4,6-Dinitro-2-methylphenol	ND		50	2.2
88-75-5	2-Nitrophenol	ND		10	1.7
87-86-5	Pentachlorophenol	ND		10	0.66
108-95-2	Phenol	ND		2.0	0.58
95-95-4	2,4,5-Trichlorophenol	ND		10	1.5
88-06-2	2,4,6-Trichlorophenol	ND		10	1.7
98-86-2	Acetophenone	ND		10	0.80
1912-24-9	Atrazine	ND		10	0.89
100-52-7	Benzaldehyde	ND		10	1.5
92-52-4	1,1'-Biphenyl	ND		10	0.42
105-60-2	Caprolactam	ND		50	12
111-91-1	Bis(2-chloroethoxy)methane	ND		10	0.58
111-44-4	Bis(2-chloroethyl)ether	ND		2.0	0.25

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-86837/1-A

Matrix: Water | Lab File ID: N1017005.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1000(mL) | Date Analyzed: 10/17/2013 12:03

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	69		37-104
4165-62-2	Phenol-d5 (Surr)	66		30-102
321-60-8	2-Fluorobiphenyl	69		35-108
118-79-6	2,4,6-Tribromophenol (Surr)	70		33-122
367-12-4	2-Fluorophenol (Surr)	67		26-100
1718-51-0	Terphenyl-d14 (Surr)	87		25-130

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN101713D.b\N1017005.D
Lab Smp Id: MB 180-86837/1-A
Inj Date : 17-OCT-2013 12:03
Operator : 3200 Inst ID: 733.i
Smp Info : MB 180-86837/1-A
Misc Info : TN101713D.b,T8270d.m,padepi.sub
Comment :
Method : \\PITSVR06\D\chem\733.i\TN101713D.b\T8270d.m
Meth Date : 17-Oct-2013 11:57 piccolinov Quant Type: ISTD
Cal Date : 09-OCT-2013 08:22 Cal File: N1009IC8.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: padepi.sub
Target Version: 4.14
Processing Host: PITPC-502

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
* 1	1,4-Dichlorobenzene-d4	152	6.287	6.271	(1.000)	161981	8.00000	
* 2	Naphthalene-d8	136	7.515	7.505	(1.000)	570930	8.00000	
* 3	Acenaphthene-d10	164	9.161	9.156	(1.000)	334864	8.00000	
* 4	Phenanthrene-d10	188	10.539	10.540	(1.000)	563932	8.00000	
* 5	Chrysene-d12	240	14.102	14.113	(1.000)	504560	8.00000	
* 6	Perylene-d12	264	17.040	17.062	(1.000)	377143	8.00000	
198	1,4-Dioxane	88	Compound Not Detected.					
10	N-Nitrosodimethylamine	74	Compound Not Detected.					
9	Pyridine	79	Compound Not Detected.					
16	Methyl methanesulfonate	80	Compound Not Detected.					
206	Benzaldehyde	77	Compound Not Detected.					
21	Aniline	93	Compound Not Detected.					
22	Phenol	94	Compound Not Detected.					
23	bis(2-Chloroethyl)ether	93	Compound Not Detected.					
24	2-Chlorophenol	128	Compound Not Detected.					
26	1,3-Dichlorobenzene	146	Compound Not Detected.					
27	1,4-Dichlorobenzene	146	Compound Not Detected.					
28	1,2-Dichlorobenzene	146	Compound Not Detected.					
217	Indene	116	Compound Not Detected.					
29	Benzyl Alcohol	108	Compound Not Detected.					
30	2-Methylphenol	108	Compound Not Detected.					
31	2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
37	Acetophenone	105	Compound Not Detected.					
32	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
192	4-Methylphenol	108	Compound Not Detected.					
34	Hexachloroethane	117	Compound Not Detected.					
35	Nitrobenzene	77	Compound Not Detected.					
36	N-Nitrosopyrrolidine	100	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
41 Isophorone	82	Compound Not Detected.					
42 2-Nitrophenol	139	Compound Not Detected.					
43 2,4-Dimethylphenol	107	Compound Not Detected.					
44 bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
48 2,4-Dichlorophenol	162	Compound Not Detected.					
49 Benzoic Acid	122	Compound Not Detected.					
50 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
51 Naphthalene	128	Compound Not Detected.					
52 4-Chloroaniline	127	Compound Not Detected.					
54 2,6-Dichlorophenol	162	Compound Not Detected.					
56 Hexachlorobutadiene	224	Compound Not Detected.					
208 Caprolactam	113	Compound Not Detected.					
59 4-Chloro-3-Methylphenol	107	Compound Not Detected.					
62 2-Methylnaphthalene	142	Compound Not Detected.					
63 1-Methylnaphthalene	142	Compound Not Detected.					
64 Hexachlorocyclopentadiene	236	Compound Not Detected.					
65 1,2,4,5-Tetrachlorobenzene	215	Compound Not Detected.					
66 2,4,6-Trichlorophenol	196	Compound Not Detected.					
67 2,4,5-Trichlorophenol	196	Compound Not Detected.					
209 1,1'-Biphenyl	154	Compound Not Detected.					
70 2-Chloronaphthalene	162	Compound Not Detected.					
73 2-Nitroaniline	65	Compound Not Detected.					
76 Dimethylphthalate	163	Compound Not Detected.					
78 2,6-Dinitrotoluene	165	Compound Not Detected.					
79 Acenaphthylene	152	Compound Not Detected.					
81 3-Nitroaniline	138	Compound Not Detected.					
82 Acenaphthene	153	Compound Not Detected.					
83 2,4-Dinitrophenol	184	Compound Not Detected.					
85 4-Nitrophenol	109	Compound Not Detected.					
86 Dibenzofuran	168	Compound Not Detected.					
87 2,4-Dinitrotoluene	165	Compound Not Detected.					
91 2,3,5,6-Tetrachlorophenol	231	Compound Not Detected.					
88 2,3,4,6-Tetrachlorophenol	231	Compound Not Detected.					
92 2-Naphthylamine	143	Compound Not Detected.					
93 Diethylphthalate	149	Compound Not Detected.					
94 Fluorene	166	Compound Not Detected.					
95 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
96 4-Nitroaniline	138	Compound Not Detected.					
98 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
99 N-Nitrosodiphenylamine (1)	169	Compound Not Detected.					
100 1,2-Diphenylhydrazine	77	Compound Not Detected.					
106 4-Bromophenyl-phenylether	248	Compound Not Detected.					
107 Hexachlorobenzene	283	Compound Not Detected.					
210 Atrazine	200	Compound Not Detected.					
111 Pentachlorophenol	265	Compound Not Detected.					
115 Phenanthrene	178	Compound Not Detected.					
116 Anthracene	178	Compound Not Detected.					
119 Carbazole	167	Compound Not Detected.					
120 Di-n-Butylphthalate	149	Compound Not Detected.					
123 Fluoranthene	202	Compound Not Detected.					
124 Benzidine	184	Compound Not Detected.					
125 Pyrene	202	Compound Not Detected.					
131 Butylbenzylphthalate	149	Compound Not Detected.					
135 3,3'-Dichlorobenzidine	252	Compound Not Detected.					

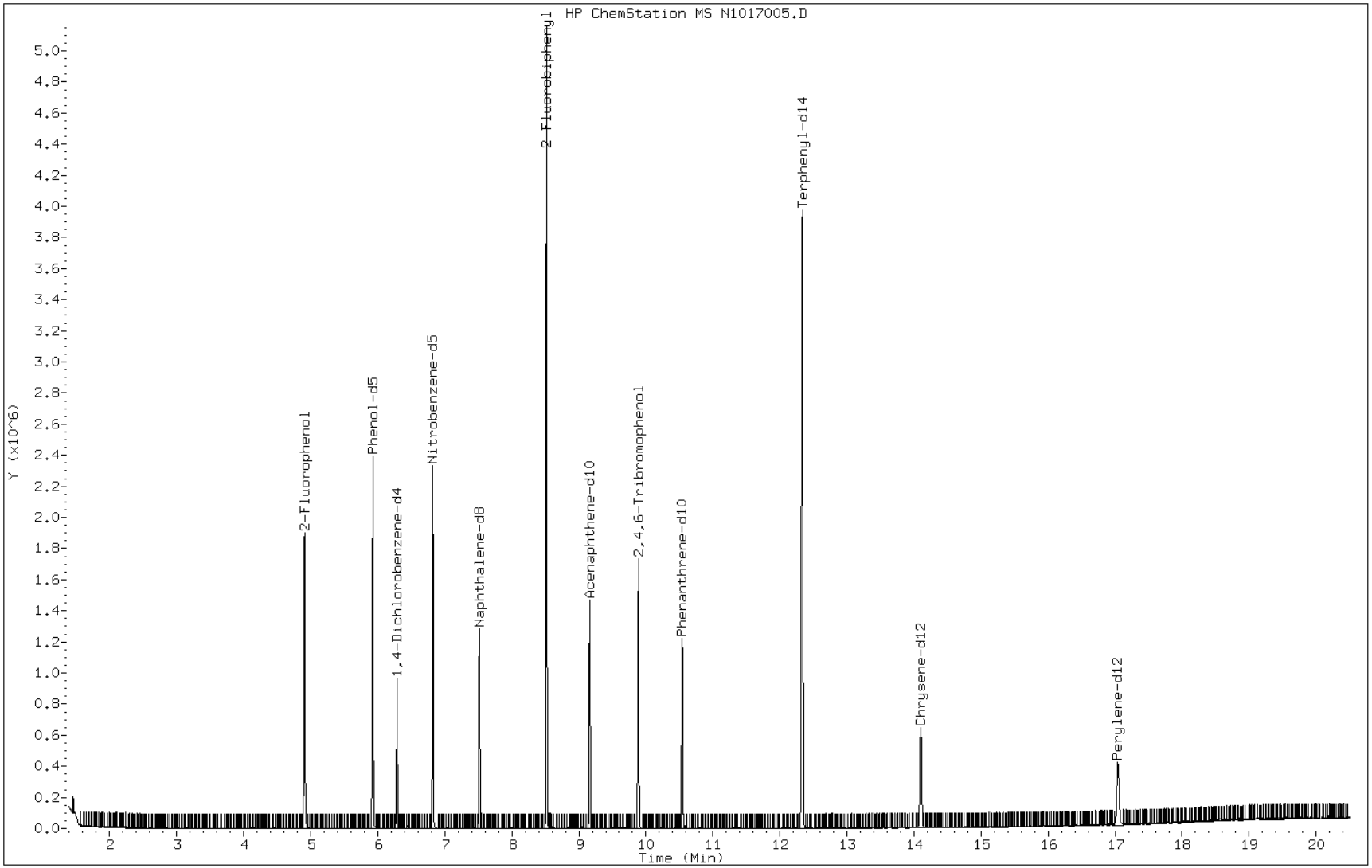
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
136 Benzo(a)Anthracene	228	Compound Not Detected.					
137 Chrysene	228	Compound Not Detected.					
139 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.					
140 Di-n-octylphthalate	149	Compound Not Detected.					
141 Benzo(b)fluoranthene	252	Compound Not Detected.					
142 Benzo(k)fluoranthene	252	Compound Not Detected.					
143 7,12-dimethylbenz[a]anthracen	256	Compound Not Detected.					
146 Benzo(a)pyrene	252	Compound Not Detected.					
149 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
150 Dibenz(a,h)anthracene	278	Compound Not Detected.					
151 Benzo(g,h,i)perylene	276	Compound Not Detected.					
$ 154 Nitrobenzene-d5	82	6.821	6.811	(0.908)	706594	27.6373	27.637
$ 155 2-Fluorobiphenyl	172	8.514	8.510	(0.929)	1712507	27.5787	27.579
$ 156 Terphenyl-d14	244	12.334	12.340	(0.875)	2077323	34.7939	34.794
$ 157 Phenol-d5	99	5.923	5.913	(0.942)	787618	26.5956	26.596
$ 158 2-Fluorophenol	112	4.908	4.888	(0.781)	674954	26.7780	26.778
$ 159 2,4,6-Tribromophenol	330	9.887	9.888	(0.938)	172923	27.9038	27.904

Data File: N1017005.D

Date: 17-OCT-2013 12:03

Client ID: Instrument: 733.i

Sample Info: MB 180-86837/1-A Operator: 3200



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-86943/1-A

Matrix: Water | Lab File ID: N1018002.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/17/2013 06:31

Sample wt/vol: 1000(mL) | Date Analyzed: 10/18/2013 11:57

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87196 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND		2.0	0.14
208-96-8	Acenaphthylene	ND		2.0	0.15
120-12-7	Anthracene	ND		2.0	0.15
56-55-3	Benzo[a]anthracene	ND		2.0	0.15
50-32-8	Benzo[a]pyrene	ND		2.0	0.13
205-99-2	Benzo[b]fluoranthene	ND		2.0	0.16
191-24-2	Benzo[g,h,i]perylene	ND		2.0	0.15
207-08-9	Benzo[k]fluoranthene	ND		2.0	0.55
117-81-7	Bis(2-ethylhexyl) phthalate	ND		20	13
108-60-1	2,2'-oxybis[1-chloropropane]	ND		2.0	0.20
101-55-3	4-Bromophenyl phenyl ether	ND		10	0.64
85-68-7	Butyl benzyl phthalate	ND		10	1.4
86-74-8	Carbazole	ND		2.0	0.16
106-47-8	4-Chloroaniline	ND		10	0.89
91-58-7	2-Chloronaphthalene	ND		2.0	0.15
7005-72-3	4-Chlorophenyl phenyl ether	ND		10	0.50
218-01-9	Chrysene	ND		2.0	0.14
53-70-3	Dibenz(a,h)anthracene	ND		2.0	0.16
132-64-9	Dibenzofuran	ND		10	0.62
84-74-2	Di-n-butyl phthalate	ND		10	1.2
91-94-1	3,3'-Dichlorobenzidine	ND		10	1.1
84-66-2	Diethyl phthalate	ND		10	1.5
131-11-3	Dimethyl phthalate	ND		10	0.77
121-14-2	2,4-Dinitrotoluene	ND		10	0.54
606-20-2	2,6-Dinitrotoluene	ND		10	0.80
117-84-0	Di-n-octyl phthalate	ND		10	2.1
206-44-0	Fluoranthene	ND		2.0	0.16
86-73-7	Fluorene	ND		2.0	0.22
118-74-1	Hexachlorobenzene	ND		2.0	0.18
87-68-3	Hexachlorobutadiene	ND		2.0	0.17
77-47-4	Hexachlorocyclopentadiene	ND		10	0.52
67-72-1	Hexachloroethane	ND		10	0.63
193-39-5	Indeno[1,2,3-cd]pyrene	ND		2.0	0.20
78-59-1	Isophorone	ND		10	0.64

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-86943/1-A

Matrix: Water | Lab File ID: N1018002.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/17/2013 06:31

Sample wt/vol: 1000(mL) | Date Analyzed: 10/18/2013 11:57

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87196 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
91-57-6	2-Methylnaphthalene	ND		2.0	0.12
91-20-3	Naphthalene	ND		2.0	0.14
88-74-4	2-Nitroaniline	ND		50	3.5
99-09-2	3-Nitroaniline	ND		50	3.2
100-01-6	4-Nitroaniline	ND		50	1.7
100-02-7	4-Nitrophenol	ND		50	6.5
98-95-3	Nitrobenzene	ND		20	0.84
621-64-7	N-Nitrosodi-n-propylamine	ND		2.0	0.31
86-30-6	N-Nitrosodiphenylamine	ND		10	0.85
85-01-8	Phenanthrene	ND		2.0	0.43
129-00-0	Pyrene	ND		2.0	0.16
59-50-7	4-Chloro-3-methylphenol	ND		10	0.75
95-57-8	2-Chlorophenol	ND		10	1.7
95-48-7	2-Methylphenol	ND		10	0.86
106-44-5	Methylphenol, 3 & 4	ND		10	0.90
120-83-2	2,4-Dichlorophenol	ND		2.0	0.33
105-67-9	2,4-Dimethylphenol	ND		10	0.85
51-28-5	2,4-Dinitrophenol	ND		50	6.1
534-52-1	4,6-Dinitro-2-methylphenol	ND		50	2.2
88-75-5	2-Nitrophenol	ND		10	1.7
87-86-5	Pentachlorophenol	ND		10	0.66
108-95-2	Phenol	ND		2.0	0.58
95-95-4	2,4,5-Trichlorophenol	ND		10	1.5
88-06-2	2,4,6-Trichlorophenol	ND		10	1.7
98-86-2	Acetophenone	ND		10	0.80
1912-24-9	Atrazine	ND		10	0.89
100-52-7	Benzaldehyde	ND		10	1.5
92-52-4	1,1'-Biphenyl	ND		10	0.42
105-60-2	Caprolactam	ND		50	12
111-91-1	Bis(2-chloroethoxy)methane	ND		10	0.58
111-44-4	Bis(2-chloroethyl)ether	ND		2.0	0.25

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-86943/1-A

Matrix: Water | Lab File ID: N1018002.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/17/2013 06:31

Sample wt/vol: 1000(mL) | Date Analyzed: 10/18/2013 11:57

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87196 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	59		37-104
4165-62-2	Phenol-d5 (Surr)	60		30-102
321-60-8	2-Fluorobiphenyl	63		35-108
118-79-6	2,4,6-Tribromophenol (Surr)	69		33-122
367-12-4	2-Fluorophenol (Surr)	61		26-100
1718-51-0	Terphenyl-d14 (Surr)	81		25-130

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN101813D.b\N1018002.D
Lab Smp Id: MB 180-86943/1-A
Inj Date : 18-OCT-2013 11:57
Operator : 3200 Inst ID: 733.i
Smp Info : MB 180-86943/1-A
Misc Info : TN101813D.b,T8270d.m,padepi.sub
Comment :
Method : \\PITSVR06\D\chem\733.i\TN101813D.b\T8270d.m
Meth Date : 19-Oct-2013 05:41 733.i Quant Type: ISTD
Cal Date : 09-OCT-2013 08:22 Cal File: N1009IC8.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: padepi.sub
Target Version: 4.14
Processing Host: PITPC-502

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
* 1	1,4-Dichlorobenzene-d4	152	6.265	6.275	(1.000)	176836	8.00000	
* 2	Naphthalene-d8	136	7.504	7.520	(1.000)	628155	8.00000	
* 3	Acenaphthene-d10	164	9.165	9.176	(1.000)	375755	8.00000	
* 4	Phenanthrene-d10	188	10.554	10.565	(1.000)	656775	8.00000	
* 5	Chrysene-d12	240	14.144	14.160	(1.000)	635068	8.00000	
* 6	Perylene-d12	264	17.099	17.120	(1.000)	471081	8.00000	
198	1,4-Dioxane	88	Compound Not Detected.					
10	N-Nitrosodimethylamine	74	Compound Not Detected.					
9	Pyridine	79	Compound Not Detected.					
16	Methyl methanesulfonate	80	Compound Not Detected.					
206	Benzaldehyde	77	Compound Not Detected.					
21	Aniline	93	Compound Not Detected.					
22	Phenol	94	Compound Not Detected.					
23	bis(2-Chloroethyl)ether	93	Compound Not Detected.					
24	2-Chlorophenol	128	Compound Not Detected.					
26	1,3-Dichlorobenzene	146	Compound Not Detected.					
27	1,4-Dichlorobenzene	146	Compound Not Detected.					
28	1,2-Dichlorobenzene	146	Compound Not Detected.					
217	Indene	116	Compound Not Detected.					
29	Benzyl Alcohol	108	Compound Not Detected.					
30	2-Methylphenol	108	Compound Not Detected.					
31	2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
37	Acetophenone	105	Compound Not Detected.					
32	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
192	4-Methylphenol	108	Compound Not Detected.					
34	Hexachloroethane	117	Compound Not Detected.					
35	Nitrobenzene	77	Compound Not Detected.					
36	N-Nitrosopyrrolidine	100	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
41	Isophorone	82	Compound Not Detected.					
42	2-Nitrophenol	139	Compound Not Detected.					
43	2,4-Dimethylphenol	107	Compound Not Detected.					
44	bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
48	2,4-Dichlorophenol	162	Compound Not Detected.					
49	Benzoic Acid	122	Compound Not Detected.					
50	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
51	Naphthalene	128	Compound Not Detected.					
52	4-Chloroaniline	127	Compound Not Detected.					
54	2,6-Dichlorophenol	162	Compound Not Detected.					
56	Hexachlorobutadiene	224	Compound Not Detected.					
208	Caprolactam	113	Compound Not Detected.					
59	4-Chloro-3-Methylphenol	107	Compound Not Detected.					
62	2-Methylnaphthalene	142	Compound Not Detected.					
63	1-Methylnaphthalene	142	Compound Not Detected.					
64	Hexachlorocyclopentadiene	236	Compound Not Detected.					
65	1,2,4,5-Tetrachlorobenzene	215	Compound Not Detected.					
66	2,4,6-Trichlorophenol	196	Compound Not Detected.					
67	2,4,5-Trichlorophenol	196	Compound Not Detected.					
209	1,1'-Biphenyl	154	Compound Not Detected.					
70	2-Chloronaphthalene	162	Compound Not Detected.					
73	2-Nitroaniline	65	Compound Not Detected.					
76	Dimethylphthalate	163	Compound Not Detected.					
78	2,6-Dinitrotoluene	165	Compound Not Detected.					
79	Acenaphthylene	152	Compound Not Detected.					
81	3-Nitroaniline	138	Compound Not Detected.					
82	Acenaphthene	153	Compound Not Detected.					
83	2,4-Dinitrophenol	184	Compound Not Detected.					
85	4-Nitrophenol	109	Compound Not Detected.					
86	Dibenzofuran	168	Compound Not Detected.					
87	2,4-Dinitrotoluene	165	Compound Not Detected.					
91	2,3,5,6-Tetrachlorophenol	231	Compound Not Detected.					
88	2,3,4,6-Tetrachlorophenol	231	Compound Not Detected.					
92	2-Naphthylamine	143	Compound Not Detected.					
93	Diethylphthalate	149	Compound Not Detected.					
94	Fluorene	166	Compound Not Detected.					
95	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
96	4-Nitroaniline	138	Compound Not Detected.					
98	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
99	N-Nitrosodiphenylamine (1)	169	Compound Not Detected.					
100	1,2-Diphenylhydrazine	77	Compound Not Detected.					
106	4-Bromophenyl-phenylether	248	Compound Not Detected.					
107	Hexachlorobenzene	283	Compound Not Detected.					
210	Atrazine	200	Compound Not Detected.					
111	Pentachlorophenol	265	Compound Not Detected.					
115	Phenanthrene	178	Compound Not Detected.					
116	Anthracene	178	Compound Not Detected.					
119	Carbazole	167	Compound Not Detected.					
120	Di-n-Butylphthalate	149	Compound Not Detected.					
123	Fluoranthene	202	Compound Not Detected.					
124	Benzidine	184	Compound Not Detected.					
125	Pyrene	202	Compound Not Detected.					
131	Butylbenzylphthalate	149	Compound Not Detected.					
135	3,3'-Dichlorobenzidine	252	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
136 Benzo(a)Anthracene	228	Compound Not Detected.					
137 Chrysene	228	Compound Not Detected.					
139 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.					
140 Di-n-octylphthalate	149	Compound Not Detected.					
141 Benzo(b)fluoranthene	252	Compound Not Detected.					
142 Benzo(k)fluoranthene	252	Compound Not Detected.					
143 7,12-dimethylbenz[a]anthracen	256	Compound Not Detected.					
146 Benzo(a)pyrene	252	Compound Not Detected.					
149 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
150 Dibenz(a,h)anthracene	278	Compound Not Detected.					
151 Benzo(g,h,i)perylene	276	Compound Not Detected.					
$ 154 Nitrobenzene-d5	82	6.804	6.820	(0.907)	668707	23.7727	23.773
$ 155 2-Fluorobiphenyl	172	8.519	8.530	(0.929)	1750068	25.1165	25.116
$ 156 Terphenyl-d14	244	12.360	12.376	(0.874)	2425182	32.2727	32.273
$ 157 Phenol-d5	99	5.907	5.923	(0.943)	773524	23.9255	23.925
$ 158 2-Fluorophenol	112	4.881	4.892	(0.779)	672292	24.4318	24.432
$ 159 2,4,6-Tribromophenol	330	9.897	9.913	(0.938)	199761	27.6778	27.678

Data File: N1018002.D

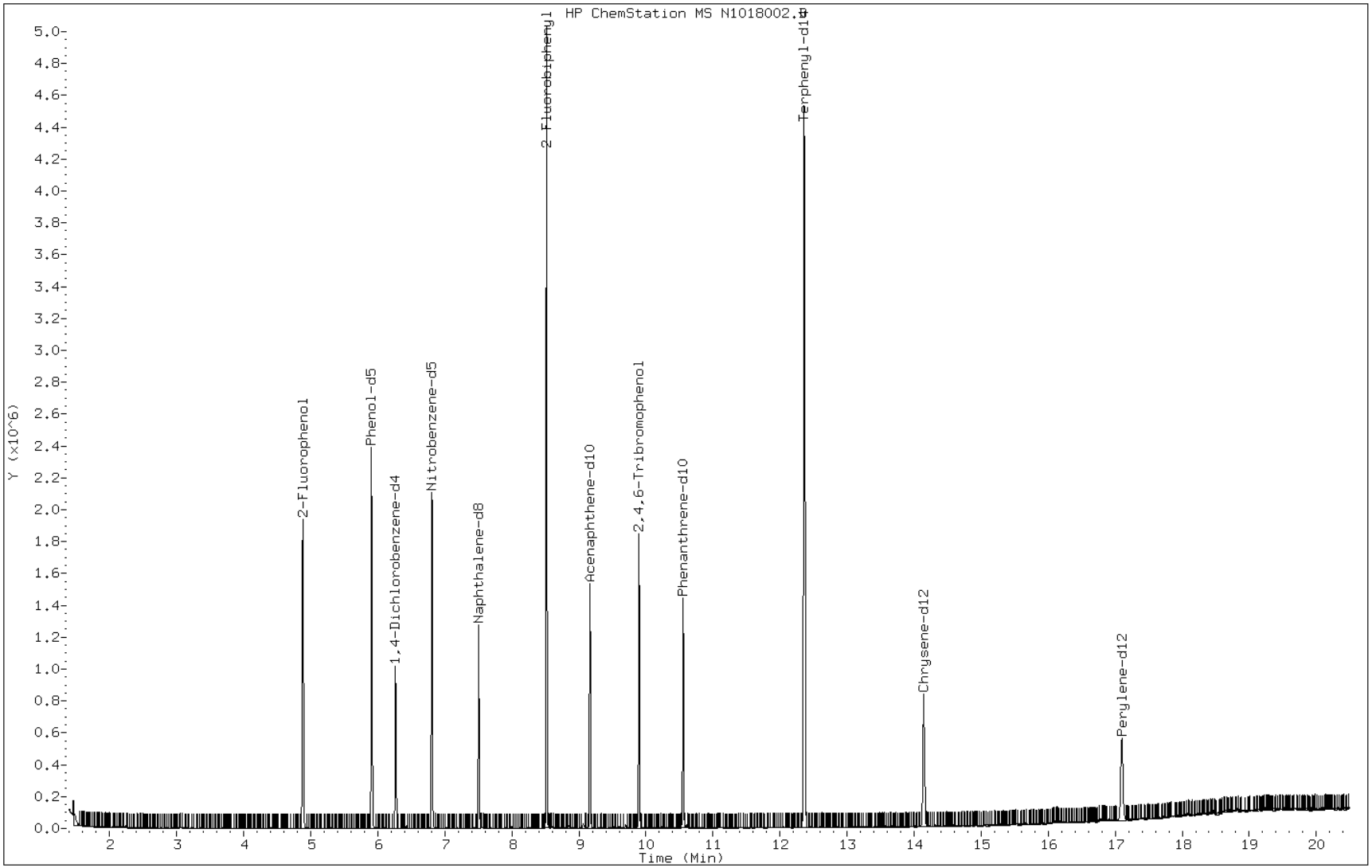
Date: 18-OCT-2013 11:57

Client ID:

Instrument: 733.i

Sample Info: MB 180-86943/1-A

Operator: 3200



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-86837/2-A

Matrix: Water | Lab File ID: N1017006.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1000(mL) | Date Analyzed: 10/17/2013 13:20

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	138		2.0	0.14
208-96-8	Acenaphthylene	136		2.0	0.15
120-12-7	Anthracene	137		2.0	0.15
56-55-3	Benzo[a]anthracene	136		2.0	0.15
50-32-8	Benzo[a]pyrene	136		2.0	0.13
205-99-2	Benzo[b]fluoranthene	130		2.0	0.16
191-24-2	Benzo[g,h,i]perylene	150		2.0	0.15
207-08-9	Benzo[k]fluoranthene	135		2.0	0.55
117-81-7	Bis(2-ethylhexyl) phthalate	152		20	13
108-60-1	2,2'-oxybis[1-chloropropane]	101		2.0	0.20
101-55-3	4-Bromophenyl phenyl ether	144		10	0.64
85-68-7	Butyl benzyl phthalate	150		10	1.4
86-74-8	Carbazole	131		2.0	0.16
106-47-8	4-Chloroaniline	118		10	0.89
91-58-7	2-Chloronaphthalene	125		2.0	0.15
7005-72-3	4-Chlorophenyl phenyl ether	140		10	0.50
218-01-9	Chrysene	145		2.0	0.14
53-70-3	Dibenz(a,h)anthracene	150		2.0	0.16
132-64-9	Dibenzofuran	136		10	0.62
84-74-2	Di-n-butyl phthalate	145		10	1.2
91-94-1	3,3'-Dichlorobenzidine	150		10	1.1
84-66-2	Diethyl phthalate	145		10	1.5
131-11-3	Dimethyl phthalate	140		10	0.77
121-14-2	2,4-Dinitrotoluene	142		10	0.54
606-20-2	2,6-Dinitrotoluene	145		10	0.80
117-84-0	Di-n-octyl phthalate	139		10	2.1
206-44-0	Fluoranthene	142		2.0	0.16
86-73-7	Fluorene	138		2.0	0.22
118-74-1	Hexachlorobenzene	143		2.0	0.18
87-68-3	Hexachlorobutadiene	133		2.0	0.17
77-47-4	Hexachlorocyclopentadiene	139		10	0.52
67-72-1	Hexachloroethane	121		10	0.63
193-39-5	Indeno[1,2,3-cd]pyrene	142		2.0	0.20
78-59-1	Isophorone	132		10	0.64

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-86837/2-A

Matrix: Water | Lab File ID: N1017006.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1000(mL) | Date Analyzed: 10/17/2013 13:20

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
91-57-6	2-Methylnaphthalene	127		2.0	0.12
91-20-3	Naphthalene	125		2.0	0.14
88-74-4	2-Nitroaniline	142		50	3.5
99-09-2	3-Nitroaniline	136		50	3.2
100-01-6	4-Nitroaniline	135		50	1.7
100-02-7	4-Nitrophenol	299		50	6.5
98-95-3	Nitrobenzene	123		20	0.84
621-64-7	N-Nitrosodi-n-propylamine	126		2.0	0.31
86-30-6	N-Nitrosodiphenylamine	140		10	0.85
85-01-8	Phenanthrene	135		2.0	0.43
129-00-0	Pyrene	141		2.0	0.16
59-50-7	4-Chloro-3-methylphenol	134		10	0.75
95-57-8	2-Chlorophenol	127		10	1.7
95-48-7	2-Methylphenol	128		10	0.86
106-44-5	Methylphenol, 3 & 4	128		10	0.90
120-83-2	2,4-Dichlorophenol	133		2.0	0.33
105-67-9	2,4-Dimethylphenol	140		10	0.85
51-28-5	2,4-Dinitrophenol	266		50	6.1
534-52-1	4,6-Dinitro-2-methylphenol	290		50	2.2
88-75-5	2-Nitrophenol	134		10	1.7
87-86-5	Pentachlorophenol	271		10	0.66
108-95-2	Phenol	120		2.0	0.58
95-95-4	2,4,5-Trichlorophenol	140		10	1.5
88-06-2	2,4,6-Trichlorophenol	143		10	1.7
98-86-2	Acetophenone	113		10	0.80
1912-24-9	Atrazine	126		10	0.89
100-52-7	Benzaldehyde	183		10	1.5
92-52-4	1,1'-Biphenyl	132		10	0.42
105-60-2	Caprolactam	138		50	12
111-91-1	Bis(2-chloroethoxy)methane	120		10	0.58
111-44-4	Bis(2-chloroethyl)ether	120		2.0	0.25

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-86837/2-A

Matrix: Water | Lab File ID: N1017006.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1000(mL) | Date Analyzed: 10/17/2013 13:20

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	60		37-104
4165-62-2	Phenol-d5 (Surr)	62		30-102
321-60-8	2-Fluorobiphenyl	66		35-108
118-79-6	2,4,6-Tribromophenol (Surr)	73		33-122
367-12-4	2-Fluorophenol (Surr)	63		26-100
1718-51-0	Terphenyl-d14 (Surr)	84		25-130

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN101713D.b\N1017006.D
Lab Smp Id: LCS 180-86837/2-A
Inj Date : 17-OCT-2013 13:20
Operator : 3200 Inst ID: 733.i
Smp Info : LCS 180-86837/2-A
Misc Info : TN101713D.b,T8270d.m,padepi.sub
Comment :
Method : \\PITSVR06\D\chem\733.i\TN101713D.b\T8270d.m
Meth Date : 17-Oct-2013 11:57 piccolinov Quant Type: ISTD
Cal Date : 09-OCT-2013 08:22 Cal File: N1009IC8.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: padepi.sub
Target Version: 4.14
Processing Host: PITPC-502

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
* 1	1,4-Dichlorobenzene-d4	152	6.286	6.271	(1.000)	154806	8.00000	
* 2	Naphthalene-d8	136	7.514	7.505	(1.000)	532428	8.00000	
* 3	Acenaphthene-d10	164	9.160	9.156	(1.000)	292267	8.00000	
* 4	Phenanthrene-d10	188	10.543	10.540	(1.000)	471209	8.00000	
* 5	Chrysene-d12	240	14.101	14.113	(1.000)	459457	8.00000	
* 6	Perylene-d12	264	17.039	17.062	(1.000)	387551	8.00000	
198	1,4-Dioxane	88	1.734	1.693	(0.276)	220843	21.9246	21.924
10	N-Nitrosodimethylamine	74	2.375	2.318	(0.378)	296779	23.6829	23.683
9	Pyridine	79	2.439	2.387	(0.388)	579817	25.3891	25.389
16	Methyl methanesulfonate	80	Compound Not Detected.					
206	Benzaldehyde	77	5.837	5.817	(0.929)	689527	36.6174	36.617
21	Aniline	93	5.949	5.935	(0.946)	718754	21.2040	21.204
22	Phenol	94	5.939	5.924	(0.945)	773747	24.0474	24.047
23	bis(2-Chloroethyl)ether	93	6.019	6.004	(0.958)	491924	24.0741	24.074
24	2-Chlorophenol	128	6.077	6.063	(0.967)	645744	25.4724	25.472
26	1,3-Dichlorobenzene	146	6.232	6.218	(0.991)	740508	24.3219	24.322
27	1,4-Dichlorobenzene	146	6.302	6.293	(1.003)	753240	24.1685	24.168
28	1,2-Dichlorobenzene	146	6.457	6.442	(1.027)	699159	23.9943	23.994
217	Indene	116	6.542	6.528	(1.041)	1039587	24.2249	24.225
29	Benzyl Alcohol	108	6.419	6.405	(1.021)	360869	25.6055	25.606
30	2-Methylphenol	108	6.531	6.522	(1.039)	546283	25.6661	25.666
31	2,2'-oxybis(1-Chloropropane)	45	6.553	6.538	(1.042)	452930	20.2939	20.294(M)
37	Acetophenone	105	6.676	6.661	(1.062)	787917	22.6672	22.667
32	N-Nitroso-di-n-propylamine	70	6.670	6.661	(1.061)	391104	25.2048	25.205
192	4-Methylphenol	108	6.676	6.667	(1.062)	571572	25.6188	25.619
34	Hexachloroethane	117	6.788	6.779	(1.080)	281475	24.1076	24.108
35	Nitrobenzene	77	6.841	6.827	(0.910)	587774	24.5096	24.510
36	N-Nitrosopyrrolidine	100	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
41	Isophorone	82	7.066	7.051	(0.940)	1018822	26.4704	26.470
42	2-Nitrophenol	139	7.146	7.137	(0.951)	348345	26.7058	26.706
43	2,4-Dimethylphenol	107	7.178	7.169	(0.955)	588328	27.9763	27.976
44	bis(2-Chloroethoxy)methane	93	7.263	7.254	(0.967)	574848	24.0333	24.033
48	2,4-Dichlorophenol	162	7.376	7.366	(0.982)	575674	26.5355	26.535
49	Benzoic Acid	122	7.263	7.238	(0.967)	300909	29.3125	29.312(M)
50	1,2,4-Trichlorobenzene	180	7.461	7.452	(0.993)	689093	26.0077	26.008
51	Naphthalene	128	7.536	7.527	(1.003)	1767736	25.0278	25.028
52	4-Chloroaniline	127	7.573	7.564	(1.008)	671014	23.6654	23.665
54	2,6-Dichlorophenol	162	Compound Not Detected.					
56	Hexachlorobutadiene	225	7.653	7.649	(1.018)	474564	26.5854	26.585
208	Caprolactam	113	7.883	7.863	(1.049)	139712	27.5107	27.511
59	4-Chloro-3-Methylphenol	107	8.017	8.013	(1.067)	514408	26.8501	26.850
62	2-Methylnaphthalene	142	8.182	8.178	(1.089)	1249778	25.3911	25.391
63	1-Methylnaphthalene	142	8.278	8.274	(1.102)	1143556	25.3972	25.397
64	Hexachlorocyclopentadiene	237	8.337	8.333	(0.910)	529423	27.8982	27.898
65	1,2,4,5-Tetrachlorobenzene	216	8.342	8.339	(0.911)	752890	27.1776	27.178
66	2,4,6-Trichlorophenol	196	8.444	8.435	(0.922)	438924	28.5993	28.599
67	2,4,5-Trichlorophenol	196	8.476	8.472	(0.925)	450239	27.9093	27.909
209	1,1'-Biphenyl	154	8.615	8.606	(0.941)	1495287	26.4984	26.498
70	2-Chloronaphthalene	162	8.642	8.638	(0.943)	1201391	24.9190	24.919
73	2-Nitroaniline	65	8.722	8.718	(0.952)	300868	28.4776	28.478
76	Dimethylphthalate	163	8.871	8.867	(0.969)	1312183	27.9389	27.939
78	2,6-Dinitrotoluene	165	8.935	8.932	(0.976)	303276	29.0994	29.099
79	Acenaphthylene	152	9.032	9.028	(0.986)	1844182	27.2639	27.264
81	3-Nitroaniline	138	9.096	9.092	(0.993)	282525	27.1676	27.168
82	Acenaphthene	153	9.192	9.188	(1.003)	1226133	27.6881	27.688
83	2,4-Dinitrophenol	184	9.192	9.188	(1.003)	384233	53.1960	53.196
85	4-Nitrophenol	109	9.229	9.225	(1.008)	342397	59.8540	59.854
86	Dibenzofuran	168	9.347	9.343	(1.020)	1644240	27.1651	27.165
87	2,4-Dinitrotoluene	165	9.309	9.306	(1.016)	381573	28.3935	28.393
91	2,3,5,6-Tetrachlorophenol	231	Compound Not Detected.					
88	2,3,4,6-Tetrachlorophenol	232	9.459	9.455	(1.033)	379243	27.1845	27.184
92	2-Naphthylamine	143	Compound Not Detected.					
93	Diethylphthalate	149	9.518	9.509	(1.039)	1279746	28.9732	28.973
94	Fluorene	166	9.667	9.663	(1.055)	1338532	27.5041	27.504
95	4-Chlorophenyl-phenylether	204	9.646	9.642	(1.053)	760783	28.0169	28.017
96	4-Nitroaniline	138	9.662	9.658	(1.055)	269863	26.9319	26.932
98	4,6-Dinitro-2-methylphenol	198	9.694	9.685	(0.919)	511883	57.9995	58.000
99	N-Nitrosodiphenylamine (1)	169	9.753	9.749	(0.925)	893352	27.9125	27.912
100	1,2-Diphenylhydrazine	77	9.790	9.792	(0.929)	1126718	27.4202	27.420
106	4-Bromophenyl-phenylether	248	10.100	10.096	(0.958)	445949	28.7077	28.708
107	Hexachlorobenzene	284	10.191	10.187	(0.967)	415889	28.5595	28.560
210	Atrazine	200	10.212	10.214	(0.969)	310179	25.2788	25.279
111	Pentachlorophenol	266	10.356	10.358	(0.982)	538297	54.1448	54.145
115	Phenanthrene	178	10.565	10.566	(1.002)	1780589	26.9797	26.980
116	Anthracene	178	10.613	10.614	(1.007)	1792066	27.4001	27.400
119	Carbazole	167	10.757	10.759	(1.020)	1486397	26.2576	26.258
120	Di-n-Butylphthalate	149	11.051	11.052	(1.048)	1866887	28.9361	28.936
123	Fluoranthene	202	11.874	11.875	(1.126)	2075793	28.3211	28.321
124	Benzidine	184	11.991	12.003	(0.850)	231406	13.3091	13.309
125	Pyrene	202	12.178	12.180	(0.864)	2055430	28.1898	28.190
131	Butylbenzylphthalate	149	13.028	13.040	(0.924)	749548	30.0940	30.094
135	3,3'-Dichlorobenzidine	252	14.000	14.012	(0.993)	659897	30.0226	30.022

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
136 Benzo(a)Anthracene	228	14.080	14.097	(0.998)	1800033	27.2153	27.215
137 Chrysene	228	14.149	14.167	(1.003)	1719367	29.0388	29.039
139 bis(2-ethylhexyl)Phthalate	149	14.032	14.049	(0.995)	1006946	30.4331	30.433
140 Di-n-octylphthalate	149	15.341	15.364	(0.900)	1668610	27.8198	27.820
141 Benzo(b)fluoranthene	252	16.238	16.261	(0.953)	1753940	26.0029	26.003
142 Benzo(k)fluoranthene	252	16.297	16.314	(0.956)	1812683	26.9485	26.948
143 7,12-dimethylbenz[a]anthracen	256	Compound Not Detected.					
146 Benzo(a)pyrene	252	16.922	16.945	(0.993)	1620545	27.2748	27.275
149 Indeno(1,2,3-cd)pyrene	276	19.278	19.306	(1.131)	1740445	28.4507	28.451
150 Dibenz(a,h)anthracene	278	19.299	19.333	(1.133)	1541390	29.9018	29.902
151 Benzo(g,h,i)perylene	276	19.887	19.910	(1.167)	1528678	30.0806	30.080
$ 154 Nitrobenzene-d5	82	6.820	6.811	(0.908)	576416	24.1760	24.176
$ 155 2-Fluorobiphenyl	172	8.513	8.510	(0.929)	1440495	26.5792	26.579
$ 156 Terphenyl-d14	244	12.328	12.340	(0.874)	1834858	33.7496	33.750
$ 157 Phenol-d5	99	5.928	5.913	(0.943)	704950	24.9074	24.907
$ 158 2-Fluorophenol	112	4.907	4.888	(0.781)	606277	25.1682	25.168
$ 159 2,4,6-Tribromophenol	330	9.892	9.888	(0.938)	151531	29.2634	29.263

QC Flag Legend

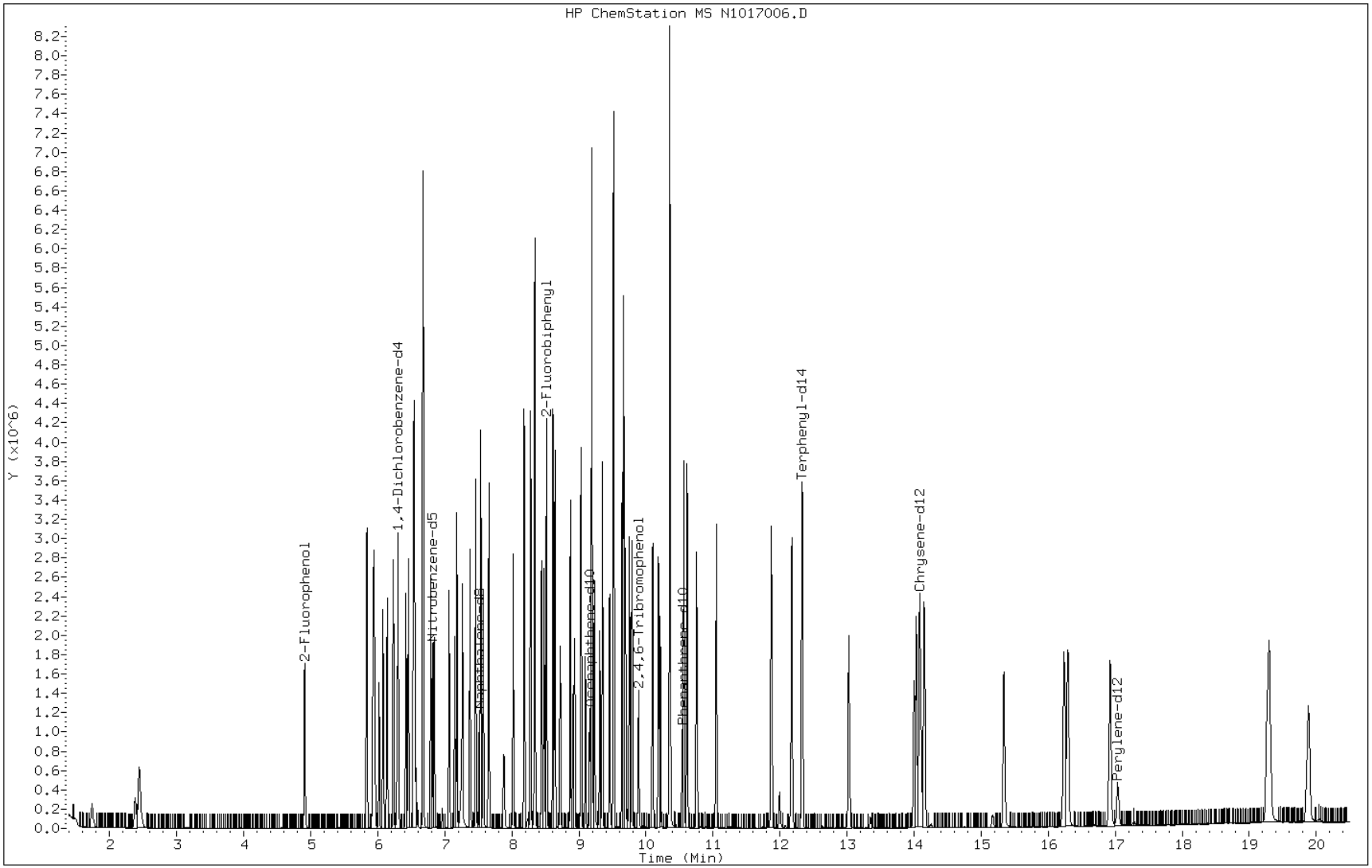
M - Compound response manually integrated.

Data File: N1017006.D

Date: 17-OCT-2013 13:20

Client ID: Instrument: 733.i

Sample Info: LCS 180-86837/2-A Operator: 3200



Manual Integration Report

Data File: N1017006.D
Inj. Date and Time: 17-OCT-2013 13:20
Instrument ID: 733.i
Client ID:
Compound: 31 2,2'-oxybis(1-Chloropropane)
CAS #: 108-60-1
Report Date: 10/18/2013

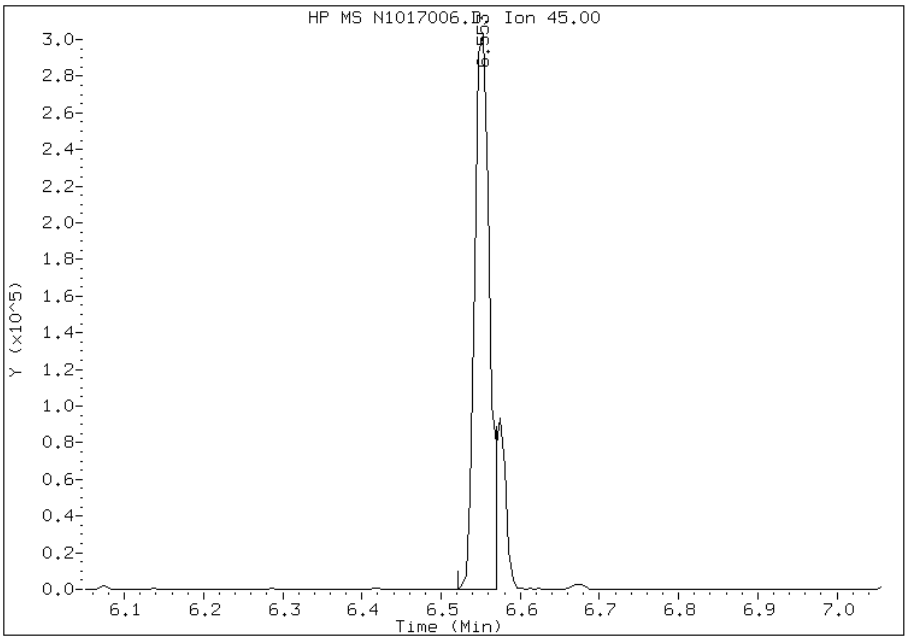
Processing Integration Results

RT: 6.55

Response: 392729

Amount: 18

Conc: 18



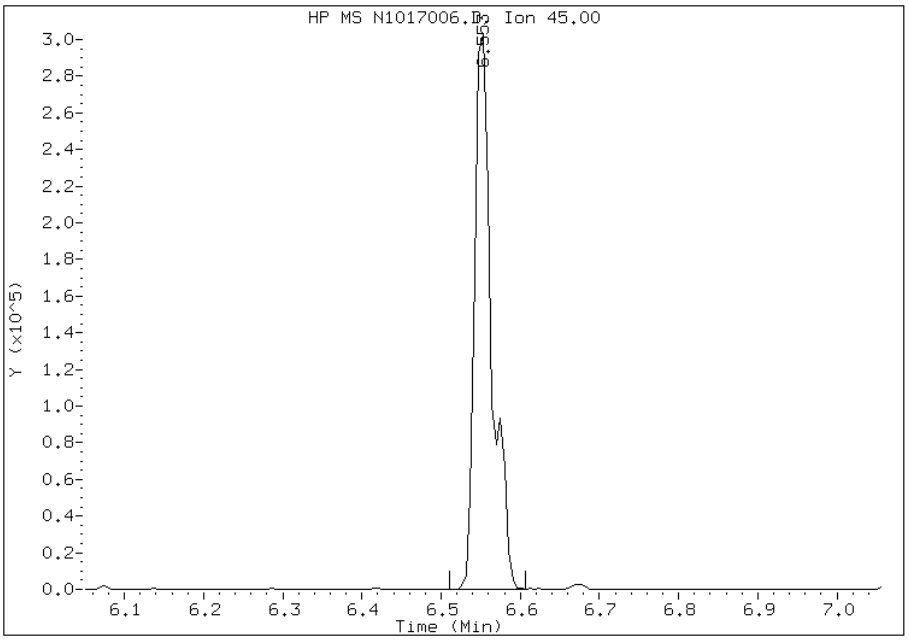
Manual Integration Results

RT: 6.55

Response: 452930

Amount: 20

Conc: 20



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 05:51
Manual Integration Reason: Poor Chromatography

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-86943/2-A

Matrix: Water | Lab File ID: N1018003.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/17/2013 06:31

Sample wt/vol: 1000(mL) | Date Analyzed: 10/18/2013 12:48

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87196 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	127		2.0	0.14
208-96-8	Acenaphthylene	125		2.0	0.15
120-12-7	Anthracene	123		2.0	0.15
56-55-3	Benzo[a]anthracene	128		2.0	0.15
50-32-8	Benzo[a]pyrene	123		2.0	0.13
205-99-2	Benzo[b]fluoranthene	123		2.0	0.16
191-24-2	Benzo[g,h,i]perylene	133		2.0	0.15
207-08-9	Benzo[k]fluoranthene	118		2.0	0.55
117-81-7	Bis(2-ethylhexyl) phthalate	141		20	13
108-60-1	2,2'-oxybis[1-chloropropane]	95.2		2.0	0.20
101-55-3	4-Bromophenyl phenyl ether	130		10	0.64
85-68-7	Butyl benzyl phthalate	142		10	1.4
86-74-8	Carbazole	122		2.0	0.16
106-47-8	4-Chloroaniline	111		10	0.89
91-58-7	2-Chloronaphthalene	110		2.0	0.15
7005-72-3	4-Chlorophenyl phenyl ether	131		10	0.50
218-01-9	Chrysene	135		2.0	0.14
53-70-3	Dibenz(a,h)anthracene	135		2.0	0.16
132-64-9	Dibenzofuran	127		10	0.62
84-74-2	Di-n-butyl phthalate	129		10	1.2
91-94-1	3,3'-Dichlorobenzidine	126		10	1.1
84-66-2	Diethyl phthalate	131		10	1.5
131-11-3	Dimethyl phthalate	127		10	0.77
121-14-2	2,4-Dinitrotoluene	131		10	0.54
606-20-2	2,6-Dinitrotoluene	129		10	0.80
117-84-0	Di-n-octyl phthalate	132		10	2.1
206-44-0	Fluoranthene	130		2.0	0.16
86-73-7	Fluorene	128		2.0	0.22
118-74-1	Hexachlorobenzene	132		2.0	0.18
87-68-3	Hexachlorobutadiene	124		2.0	0.17
77-47-4	Hexachlorocyclopentadiene	130		10	0.52
67-72-1	Hexachloroethane	118		10	0.63
193-39-5	Indeno[1,2,3-cd]pyrene	127		2.0	0.20
78-59-1	Isophorone	122		10	0.64

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-86943/2-A

Matrix: Water | Lab File ID: N1018003.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/17/2013 06:31

Sample wt/vol: 1000(mL) | Date Analyzed: 10/18/2013 12:48

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87196 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
91-57-6	2-Methylnaphthalene	119		2.0	0.12
91-20-3	Naphthalene	118		2.0	0.14
88-74-4	2-Nitroaniline	126		50	3.5
99-09-2	3-Nitroaniline	124		50	3.2
100-01-6	4-Nitroaniline	124		50	1.7
100-02-7	4-Nitrophenol	266		50	6.5
98-95-3	Nitrobenzene	112		20	0.84
621-64-7	N-Nitrosodi-n-propylamine	117		2.0	0.31
86-30-6	N-Nitrosodiphenylamine	127		10	0.85
85-01-8	Phenanthrene	128		2.0	0.43
129-00-0	Pyrene	131		2.0	0.16
59-50-7	4-Chloro-3-methylphenol	125		10	0.75
95-57-8	2-Chlorophenol	122		10	1.7
95-48-7	2-Methylphenol	123		10	0.86
106-44-5	Methylphenol, 3 & 4	121		10	0.90
120-83-2	2,4-Dichlorophenol	126		2.0	0.33
105-67-9	2,4-Dimethylphenol	130		10	0.85
51-28-5	2,4-Dinitrophenol	240		50	6.1
534-52-1	4,6-Dinitro-2-methylphenol	244		50	2.2
88-75-5	2-Nitrophenol	127		10	1.7
87-86-5	Pentachlorophenol	222		10	0.66
108-95-2	Phenol	119		2.0	0.58
95-95-4	2,4,5-Trichlorophenol	129		10	1.5
88-06-2	2,4,6-Trichlorophenol	135		10	1.7
98-86-2	Acetophenone	113		10	0.80
1912-24-9	Atrazine	128		10	0.89
100-52-7	Benzaldehyde	110		10	1.5
92-52-4	1,1'-Biphenyl	123		10	0.42
105-60-2	Caprolactam	133		50	12
111-91-1	Bis(2-chloroethoxy)methane	112		10	0.58
111-44-4	Bis(2-chloroethyl)ether	116		2.0	0.25

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-86943/2-A

Matrix: Water | Lab File ID: N1018003.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/17/2013 06:31

Sample wt/vol: 1000(mL) | Date Analyzed: 10/18/2013 12:48

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87196 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	58		37-104
4165-62-2	Phenol-d5 (Surr)	59		30-102
321-60-8	2-Fluorobiphenyl	61		35-108
118-79-6	2,4,6-Tribromophenol (Surr)	70		33-122
367-12-4	2-Fluorophenol (Surr)	62		26-100
1718-51-0	Terphenyl-d14 (Surr)	78		25-130

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN101813D.b\N1018003.D
Lab Smp Id: LCS 180-86943/2-A
Inj Date : 18-OCT-2013 12:48
Operator : 3200 Inst ID: 733.i
Smp Info : LCS 180-86943/2-A
Misc Info : TN101813D.b,T8270d.m,padepi.sub
Comment :
Method : \\PITSVR06\D\chem\733.i\TN101813D.b\T8270d.m
Meth Date : 19-Oct-2013 05:41 733.i Quant Type: ISTD
Cal Date : 09-OCT-2013 08:22 Cal File: N1009IC8.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: padepi.sub
Target Version: 4.14
Processing Host: PITPC-502

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
* 1	1,4-Dichlorobenzene-d4	152	6.274	6.275	(1.000)	168129	8.00000	
* 2	Naphthalene-d8	136	7.518	7.520	(1.000)	590019	8.00000	
* 3	Acenaphthene-d10	164	9.180	9.176	(1.000)	336073	8.00000	
* 4	Phenanthrene-d10	188	10.574	10.565	(1.000)	547088	8.00000	
* 5	Chrysene-d12	240	14.169	14.160	(1.000)	532871	8.00000	
* 6	Perylene-d12	264	17.124	17.120	(1.000)	461156	8.00000	
198	1,4-Dioxane	88	1.717	1.702	(0.274)	240734	22.0054	22.005
10	N-Nitrosodimethylamine	74	2.358	2.333	(0.376)	323146	23.7436	23.744
9	Pyridine	79	2.417	2.402	(0.385)	628442	25.3377	25.338
16	Methyl methanesulfonate	80	Compound Not Detected.					
206	Benzaldehyde	77	5.820	5.821	(0.928)	451939	22.0984	22.098
21	Aniline	93	5.937	5.939	(0.946)	825433	22.4215	22.422
22	Phenol	94	5.932	5.933	(0.946)	831599	23.7974	23.797
23	bis(2-Chloroethyl)ether	93	6.007	6.008	(0.957)	513210	23.1255	23.126
24	2-Chlorophenol	128	6.065	6.067	(0.967)	674436	24.4960	24.496
26	1,3-Dichlorobenzene	146	6.220	6.222	(0.991)	798361	24.1442	24.144
27	1,4-Dichlorobenzene	146	6.290	6.297	(1.003)	807500	23.8563	23.856
28	1,2-Dichlorobenzene	146	6.450	6.452	(1.028)	754752	23.8496	23.850
217	Indene	116	6.535	6.537	(1.042)	1115903	23.9427	23.943
29	Benzyl Alcohol	108	6.413	6.414	(1.022)	360665	23.5631	23.563
30	2-Methylphenol	108	6.530	6.532	(1.041)	568591	24.5972	24.597
31	2,2'-oxybis(1-Chloropropane)	45	6.546	6.548	(1.043)	461538	19.0408	19.041(M)
37	Acetophenone	105	6.669	6.671	(1.063)	853493	22.6080	22.608
32	N-Nitroso-di-n-propylamine	70	6.669	6.671	(1.063)	394799	23.4267	23.427
192	4-Methylphenol	108	6.674	6.676	(1.064)	584023	24.1025	24.102
34	Hexachloroethane	117	6.787	6.788	(1.082)	298429	23.5342	23.534
35	Nitrobenzene	77	6.835	6.836	(0.909)	593036	22.3153	22.315
36	N-Nitrosopyrrolidine	100	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
41	Isophorone	82	7.064	7.066	(0.940)	1043331	24.4613	24.461
42	2-Nitrophenol	139	7.150	7.146	(0.951)	367545	25.4274	25.427
43	2,4-Dimethylphenol	107	7.182	7.184	(0.955)	605310	25.9743	25.974
44	bis(2-Chloroethoxy)methane	93	7.262	7.264	(0.966)	593657	22.3971	22.397
48	2,4-Dichlorophenol	162	7.380	7.381	(0.982)	606022	25.2077	25.208
49	Benzoic Acid	122	7.267	7.264	(0.967)	323752	28.6013	28.601(M)
50	1,2,4-Trichlorobenzene	180	7.460	7.461	(0.992)	721434	24.5706	24.570
51	Naphthalene	128	7.540	7.541	(1.003)	1839761	23.5050	23.505
52	4-Chloroaniline	127	7.577	7.579	(1.008)	698212	22.2211	22.221
54	2,6-Dichlorophenol	162	Compound Not Detected.					
56	Hexachlorobutadiene	225	7.657	7.659	(1.018)	492168	24.8804	24.880
208	Caprolactam	113	7.892	7.889	(1.050)	149765	26.6118	26.612
59	4-Chloro-3-Methylphenol	107	8.031	8.033	(1.068)	530473	24.9860	24.986
62	2-Methylnaphthalene	142	8.192	8.193	(1.090)	1296335	23.7663	23.766
63	1-Methylnaphthalene	142	8.288	8.289	(1.102)	1194671	23.9426	23.943
64	Hexachlorocyclopentadiene	237	8.346	8.348	(0.909)	565837	25.9305	25.930
65	1,2,4,5-Tetrachlorobenzene	216	8.357	8.353	(0.910)	790365	24.8115	24.812
66	2,4,6-Trichlorophenol	196	8.459	8.455	(0.921)	477595	27.0628	27.063
67	2,4,5-Trichlorophenol	196	8.491	8.492	(0.925)	477216	25.7257	25.726
209	1,1'-Biphenyl	154	8.624	8.626	(0.939)	1594897	24.5795	24.580
70	2-Chloronaphthalene	162	8.656	8.658	(0.943)	1223841	22.0759	22.076
73	2-Nitroaniline	65	8.736	8.738	(0.952)	305075	25.1119	25.112
76	Dimethylphthalate	163	8.891	8.888	(0.969)	1376454	25.4872	25.487
78	2,6-Dinitrotoluene	165	8.950	8.952	(0.975)	310302	25.8926	25.893
79	Acenaphthylene	152	9.046	9.048	(0.985)	1941435	24.9605	24.960
81	3-Nitroaniline	138	9.116	9.117	(0.993)	297403	24.8706	24.871
82	Acenaphthene	153	9.212	9.208	(1.003)	1297766	25.4858	25.486
83	2,4-Dinitrophenol	184	9.212	9.208	(1.003)	393618	48.0034	48.003
85	4-Nitrophenol	109	9.255	9.251	(1.008)	350187	53.2365	53.236
86	Dibenzofuran	168	9.367	9.368	(1.020)	1767225	25.3912	25.391
87	2,4-Dinitrotoluene	165	9.329	9.331	(1.016)	404971	26.2066	26.207
91	2,3,5,6-Tetrachlorophenol	231	Compound Not Detected.					
88	2,3,4,6-Tetrachlorophenol	232	9.479	9.475	(1.033)	418144	26.0661	26.066
92	2-Naphthylamine	143	Compound Not Detected.					
93	Diethylphthalate	149	9.538	9.534	(1.039)	1329033	26.1670	26.167
94	Fluorene	166	9.687	9.689	(1.055)	1435321	25.6486	25.649
95	4-Chlorophenyl-phenylether	204	9.666	9.668	(1.053)	815150	26.1061	26.106
96	4-Nitroaniline	138	9.687	9.684	(1.055)	286242	24.8429	24.843
98	4,6-Dinitro-2-methylphenol	198	9.714	9.710	(0.919)	494187	48.7880	48.788
99	N-Nitrosodiphenylamine (1)	169	9.773	9.769	(0.924)	945632	25.4480	25.448
100	1,2-Diphenylhydrazine	77	9.816	9.812	(0.928)	1136740	23.8272	23.827
106	4-Bromophenyl-phenylether	248	10.125	10.122	(0.958)	470383	26.0808	26.081
107	Hexachlorobenzene	284	10.216	10.207	(0.966)	446517	26.4100	26.410
210	Atrazine	200	10.243	10.239	(0.969)	364397	25.5785	25.578
111	Pentachlorophenol	266	10.387	10.378	(0.982)	502783	44.3885	44.388
115	Phenanthrene	178	10.595	10.592	(1.002)	1963130	25.6200	25.620
116	Anthracene	178	10.644	10.640	(1.007)	1871096	24.6405	24.640
119	Carbazole	167	10.788	10.784	(1.020)	1605602	24.4295	24.429
120	Di-n-Butylphthalate	149	11.087	11.078	(1.048)	1928795	25.7493	25.749
123	Fluoranthene	202	11.915	11.911	(1.127)	2220591	26.0946	26.095
124	Benzidine	184	12.043	12.040	(0.850)	134606	5.63249	5.6325
125	Pyrene	202	12.225	12.216	(0.863)	2212951	26.1688	26.169
131	Butylbenzylphthalate	149	13.090	13.081	(0.924)	820028	28.3879	28.388
135	3,3'-Dichlorobenzidine	252	14.073	14.064	(0.993)	641798	25.1764	25.176

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ng)
136 Benzo(a)Anthracene	228	14.153	14.144	(0.999)	1960567	25.5586	25.558
137 Chrysene	228	14.223	14.214	(1.004)	1859236	27.0749	27.075
139 bis(2-ethylhexyl)Phthalate	149	14.105	14.096	(0.995)	1080653	28.1610	28.161
140 Di-n-octylphthalate	149	15.419	15.410	(0.900)	1882677	26.4542	26.454
141 Benzo(b)fluoranthene	252	16.322	16.308	(0.953)	1968353	24.5240	24.524
142 Benzo(k)fluoranthene	252	16.376	16.372	(0.956)	1882644	23.5214	23.521
143 7,12-dimethylbenz[a]anthracen	256	Compound Not Detected.					
146 Benzo(a)pyrene	252	17.011	17.002	(0.993)	1738131	24.5846	24.585
149 Indeno(1,2,3-cd)pyrene	276	19.367	19.374	(1.131)	1853273	25.4597	25.460
150 Dibenz(a,h)anthracene	278	19.405	19.396	(1.133)	1652541	26.9413	26.941
151 Benzo(g,h,i)perylene	276	19.992	19.983	(1.168)	1611754	26.6532	26.653
$ 154 Nitrobenzene-d5	82	6.819	6.820	(0.907)	611535	23.1454	23.145
$ 155 2-Fluorobiphenyl	172	8.528	8.530	(0.929)	1531827	24.5802	24.580
$ 156 Terphenyl-d14	244	12.385	12.376	(0.874)	1960144	31.0869	31.087
$ 157 Phenol-d5	99	5.921	5.923	(0.944)	730286	23.7579	23.758
$ 158 2-Fluorophenol	112	4.890	4.892	(0.779)	653592	24.9823	24.982
$ 159 2,4,6-Tribromophenol	330	9.912	9.913	(0.937)	168417	28.0134	28.013

QC Flag Legend

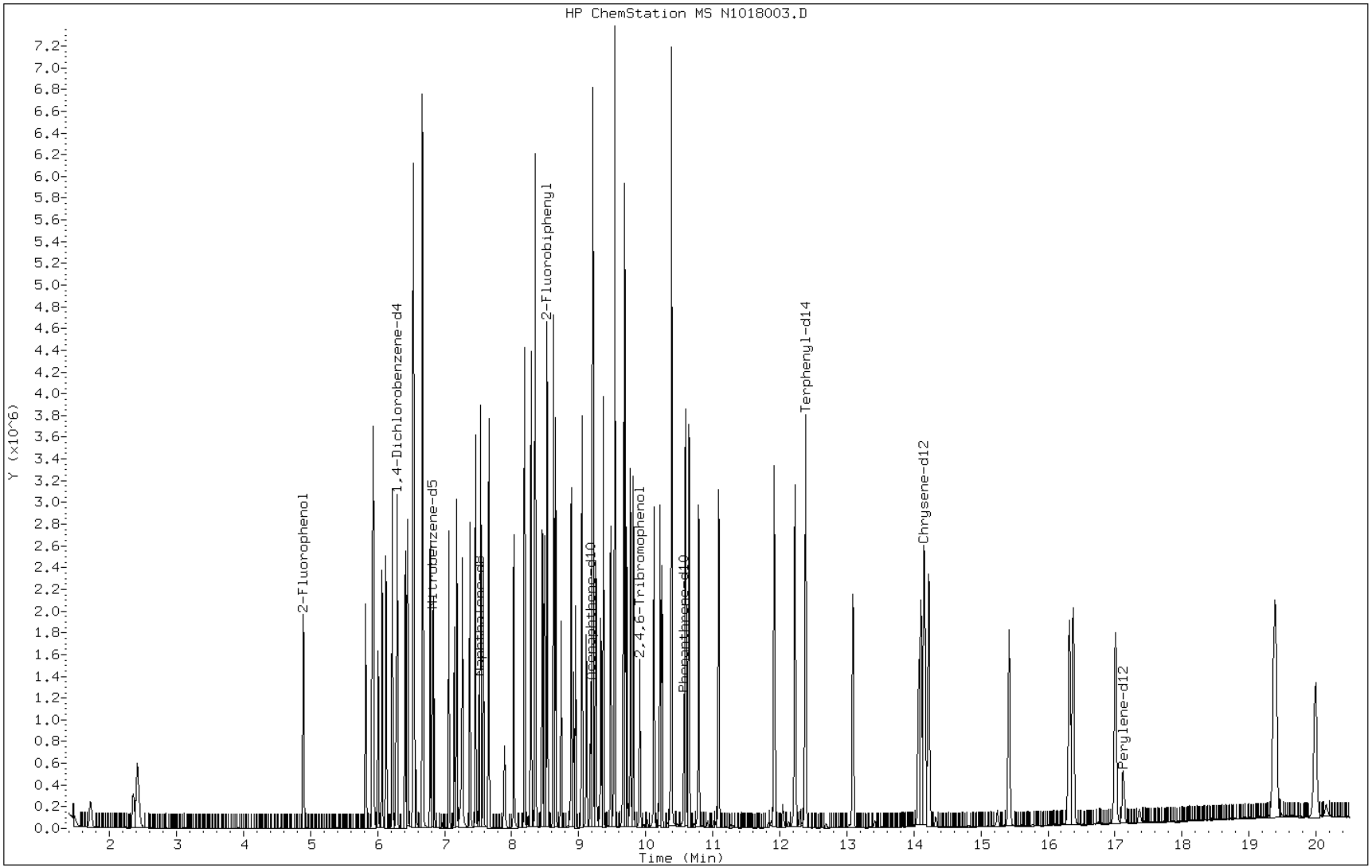
M - Compound response manually integrated.

Data File: N1018003.D

Date: 18-OCT-2013 12:48

Client ID: Instrument: 733.i

Sample Info: LCS 180-86943/2-A Operator: 3200



Manual Integration Report

Data File: N1018003.D
Inj. Date and Time: 18-OCT-2013 12:48
Instrument ID: 733.i
Client ID:
Compound: 31 2,2'-oxybis(1-Chloropropane)
CAS #: 108-60-1
Report Date: 10/19/2013

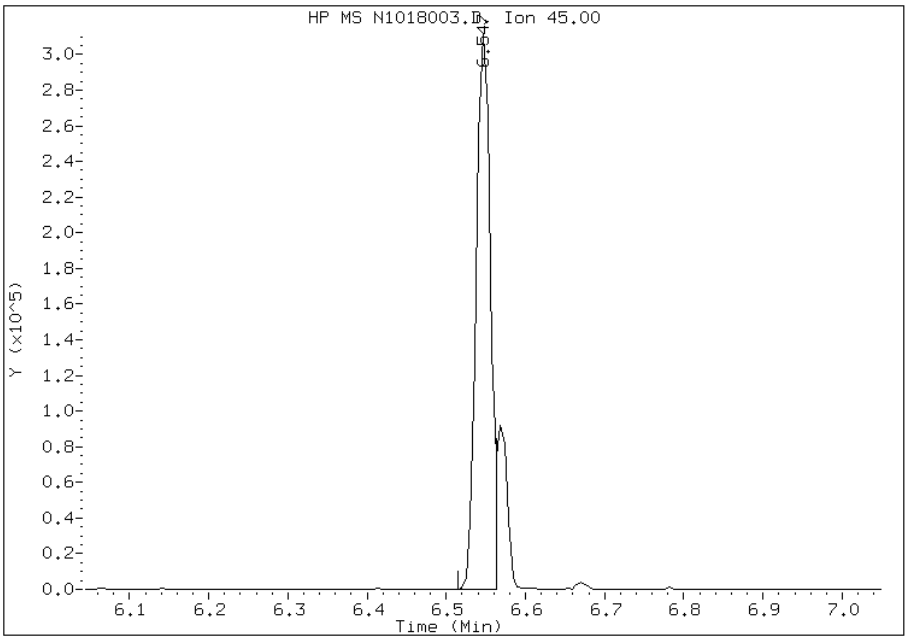
Processing Integration Results

RT: 6.55

Response: 389707

Amount: 16

Conc: 16



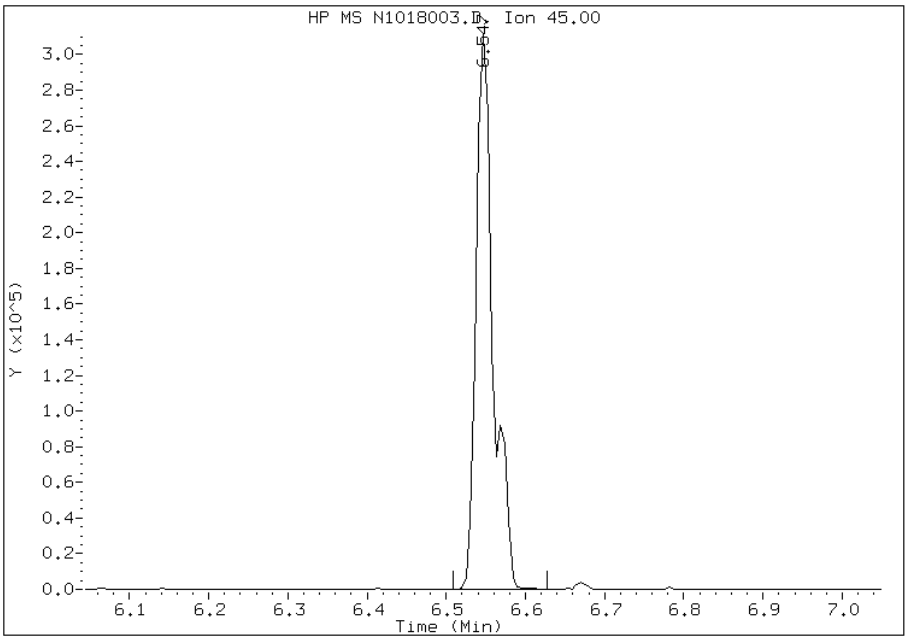
Manual Integration Results

RT: 6.55

Response: 461538

Amount: 19

Conc: 19



Manually Integrated By: piccolinov
Modification Date: 19-Oct-2013 05:46
Manual Integration Reason: Poor Chromatography

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 180-86943/3-A

Matrix: Water | Lab File ID: N1018004.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/17/2013 06:31

Sample wt/vol: 1000(mL) | Date Analyzed: 10/18/2013 13:14

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87196 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	133		2.0	0.14
208-96-8	Acenaphthylene	133		2.0	0.15
120-12-7	Anthracene	133		2.0	0.15
56-55-3	Benzo[a]anthracene	135		2.0	0.15
50-32-8	Benzo[a]pyrene	127		2.0	0.13
205-99-2	Benzo[b]fluoranthene	122		2.0	0.16
191-24-2	Benzo[g,h,i]perylene	137		2.0	0.15
207-08-9	Benzo[k]fluoranthene	122		2.0	0.55
117-81-7	Bis(2-ethylhexyl) phthalate	150		20	13
108-60-1	2,2'-oxybis[1-chloropropane]	99.4		2.0	0.20
101-55-3	4-Bromophenyl phenyl ether	143		10	0.64
85-68-7	Butyl benzyl phthalate	150		10	1.4
86-74-8	Carbazole	130		2.0	0.16
106-47-8	4-Chloroaniline	116		10	0.89
91-58-7	2-Chloronaphthalene	119		2.0	0.15
7005-72-3	4-Chlorophenyl phenyl ether	138		10	0.50
218-01-9	Chrysene	140		2.0	0.14
53-70-3	Dibenz(a,h)anthracene	139		2.0	0.16
132-64-9	Dibenzofuran	133		10	0.62
84-74-2	Di-n-butyl phthalate	138		10	1.2
91-94-1	3,3'-Dichlorobenzidine	131		10	1.1
84-66-2	Diethyl phthalate	138		10	1.5
131-11-3	Dimethyl phthalate	137		10	0.77
121-14-2	2,4-Dinitrotoluene	138		10	0.54
606-20-2	2,6-Dinitrotoluene	139		10	0.80
117-84-0	Di-n-octyl phthalate	136		10	2.1
206-44-0	Fluoranthene	139		2.0	0.16
86-73-7	Fluorene	135		2.0	0.22
118-74-1	Hexachlorobenzene	142		2.0	0.18
87-68-3	Hexachlorobutadiene	131		2.0	0.17
77-47-4	Hexachlorocyclopentadiene	137		10	0.52
67-72-1	Hexachloroethane	124		10	0.63
193-39-5	Indeno[1,2,3-cd]pyrene	132		2.0	0.20
78-59-1	Isophorone	131		10	0.64

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 180-86943/3-A

Matrix: Water | Lab File ID: N1018004.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/17/2013 06:31

Sample wt/vol: 1000(mL) | Date Analyzed: 10/18/2013 13:14

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87196 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
91-57-6	2-Methylnaphthalene	125		2.0	0.12
91-20-3	Naphthalene	123		2.0	0.14
88-74-4	2-Nitroaniline	131		50	3.5
99-09-2	3-Nitroaniline	129		50	3.2
100-01-6	4-Nitroaniline	125		50	1.7
100-02-7	4-Nitrophenol	280		50	6.5
98-95-3	Nitrobenzene	116		20	0.84
621-64-7	N-Nitrosodi-n-propylamine	126		2.0	0.31
86-30-6	N-Nitrosodiphenylamine	136		10	0.85
85-01-8	Phenanthrene	136		2.0	0.43
129-00-0	Pyrene	135		2.0	0.16
59-50-7	4-Chloro-3-methylphenol	133		10	0.75
95-57-8	2-Chlorophenol	128		10	1.7
95-48-7	2-Methylphenol	131		10	0.86
106-44-5	Methylphenol, 3 & 4	128		10	0.90
120-83-2	2,4-Dichlorophenol	133		2.0	0.33
105-67-9	2,4-Dimethylphenol	137		10	0.85
51-28-5	2,4-Dinitrophenol	254		50	6.1
534-52-1	4,6-Dinitro-2-methylphenol	266		50	2.2
88-75-5	2-Nitrophenol	131		10	1.7
87-86-5	Pentachlorophenol	232		10	0.66
108-95-2	Phenol	124		2.0	0.58
95-95-4	2,4,5-Trichlorophenol	132		10	1.5
88-06-2	2,4,6-Trichlorophenol	141		10	1.7
98-86-2	Acetophenone	118		10	0.80
1912-24-9	Atrazine	134		10	0.89
100-52-7	Benzaldehyde	114		10	1.5
92-52-4	1,1'-Biphenyl	130		10	0.42
105-60-2	Caprolactam	141		50	12
111-91-1	Bis(2-chloroethoxy)methane	118		10	0.58
111-44-4	Bis(2-chloroethyl)ether	123		2.0	0.25

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 180-86943/3-A

Matrix: Water Lab File ID: N1018004.D

Analysis Method: 8270D Date Collected:

Extract. Method: 3520C Date Extracted: 10/17/2013 06:31

Sample wt/vol: 1000(mL) Date Analyzed: 10/18/2013 13:14

Con. Extract Vol.: 10.0(mL) Dilution Factor: 1

Injection Volume: 2(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 87196 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	60		37-104
4165-62-2	Phenol-d5 (Surr)	63		30-102
321-60-8	2-Fluorobiphenyl	64		35-108
118-79-6	2,4,6-Tribromophenol (Surr)	76		33-122
367-12-4	2-Fluorophenol (Surr)	65		26-100
1718-51-0	Terphenyl-d14 (Surr)	79		25-130

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN101813D.b\N1018004.D
Lab Smp Id: LCSD 180-86943/3-A
Inj Date : 18-OCT-2013 13:14
Operator : 3200 Inst ID: 733.i
Smp Info : LCSD 180-86943/3-A
Misc Info : TN101813D.b,T8270d.m,padepi.sub
Comment :
Method : \\PITSVR06\D\chem\733.i\TN101813D.b\T8270d.m
Meth Date : 19-Oct-2013 05:41 733.i Quant Type: ISTD
Cal Date : 09-OCT-2013 08:22 Cal File: N1009IC8.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: padepi.sub
Target Version: 4.14
Processing Host: PITPC-502

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
* 1	1,4-Dichlorobenzene-d4	152	6.267	6.275	(1.000)	160783	8.00000	
* 2	Naphthalene-d8	136	7.506	7.520	(1.000)	573115	8.00000	
* 3	Acenaphthene-d10	164	9.168	9.176	(1.000)	326938	8.00000	
* 4	Phenanthrene-d10	188	10.557	10.565	(1.000)	520663	8.00000	
* 5	Chrysene-d12	240	14.147	14.160	(1.000)	518974	8.00000	
* 6	Perylene-d12	264	17.090	17.120	(1.000)	456657	8.00000	
198	1,4-Dioxane	88	1.700	1.702	(0.271)	244948	23.4136	23.414
10	N-Nitrosodimethylamine	74	2.341	2.333	(0.374)	314181	24.1396	24.140
9	Pyridine	79	2.399	2.402	(0.383)	621704	26.2113	26.211
16	Methyl methanesulfonate	80	Compound Not Detected.					
206	Benzaldehyde	77	5.813	5.821	(0.928)	444534	22.7295	22.729
21	Aniline	93	5.931	5.939	(0.946)	820358	23.3018	23.302
22	Phenol	94	5.925	5.933	(0.945)	826941	24.7453	24.745
23	bis(2-Chloroethyl)ether	93	6.000	6.008	(0.957)	524152	24.6977	24.698
24	2-Chlorophenol	128	6.059	6.067	(0.967)	675770	25.6658	25.666
26	1,3-Dichlorobenzene	146	6.208	6.222	(0.991)	808742	25.5756	25.576
27	1,4-Dichlorobenzene	146	6.283	6.297	(1.003)	805342	24.8796	24.880
28	1,2-Dichlorobenzene	146	6.438	6.452	(1.027)	751844	24.8432	24.843
217	Indene	116	6.523	6.537	(1.041)	1115301	25.0231	25.023
29	Benzyl Alcohol	108	6.401	6.414	(1.021)	366748	25.0553	25.055
30	2-Methylphenol	108	6.518	6.532	(1.040)	577059	26.1041	26.104
31	2,2'-oxybis(1-Chloropropane)	45	6.534	6.548	(1.043)	460631	19.8717	19.872(M)
37	Acetophenone	105	6.662	6.671	(1.063)	849368	23.5267	23.527
32	N-Nitroso-di-n-propylamine	70	6.657	6.671	(1.062)	405283	25.1476	25.148
192	4-Methylphenol	108	6.668	6.676	(1.064)	594435	25.6531	25.653
34	Hexachloroethane	117	6.775	6.788	(1.081)	300514	24.7814	24.781
35	Nitrobenzene	77	6.828	6.836	(0.910)	598901	23.2006	23.201
36	N-Nitrosopyrrolidine	100	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
41	Isophorone	82	7.052	7.066	(0.940)	1083052	26.1415	26.141
42	2-Nitrophenol	139	7.138	7.146	(0.951)	368167	26.2217	26.222
43	2,4-Dimethylphenol	107	7.170	7.184	(0.955)	620600	27.4159	27.416
44	bis(2-Chloroethoxy)methane	93	7.255	7.264	(0.967)	609644	23.6786	23.679
48	2,4-Dichlorophenol	162	7.368	7.381	(0.981)	620085	26.5534	26.553
49	Benzoic Acid	122	7.255	7.264	(0.967)	327002	29.5462	29.546(M)
50	1,2,4-Trichlorobenzene	180	7.453	7.461	(0.993)	751733	26.3576	26.358
51	Naphthalene	128	7.528	7.541	(1.003)	1876452	24.6809	24.681
52	4-Chloroaniline	127	7.571	7.579	(1.009)	709861	23.2582	23.258
54	2,6-Dichlorophenol	162	Compound Not Detected.					
56	Hexachlorobutadiene	225	7.645	7.659	(1.019)	501563	26.1031	26.103
208	Caprolactam	113	7.886	7.889	(1.051)	154096	28.1890	28.189
59	4-Chloro-3-Methylphenol	107	8.019	8.033	(1.068)	549022	26.6224	26.622
62	2-Methylnaphthalene	142	8.185	8.193	(1.090)	1321608	24.9443	24.944
63	1-Methylnaphthalene	142	8.276	8.289	(1.102)	1225144	25.2775	25.278
64	Hexachlorocyclopentadiene	237	8.340	8.348	(0.910)	582321	27.4315	27.432
65	1,2,4,5-Tetrachlorobenzene	216	8.345	8.353	(0.910)	798151	25.7560	25.756
66	2,4,6-Trichlorophenol	196	8.447	8.455	(0.921)	484863	28.2423	28.242
67	2,4,5-Trichlorophenol	196	8.484	8.492	(0.925)	475235	26.3347	26.335
209	1,1'-Biphenyl	154	8.618	8.626	(0.940)	1642379	26.0185	26.018
70	2-Chloronaphthalene	162	8.644	8.658	(0.943)	1286217	23.8493	23.849
73	2-Nitroaniline	65	8.724	8.738	(0.952)	310136	26.2418	26.242
76	Dimethylphthalate	163	8.879	8.888	(0.969)	1440931	27.4266	27.427
78	2,6-Dinitrotoluene	165	8.943	8.952	(0.976)	324452	27.8298	27.830
79	Acenaphthylene	152	9.040	9.048	(0.986)	2010080	26.5651	26.565
81	3-Nitroaniline	138	9.104	9.117	(0.993)	300421	25.8250	25.825
82	Acenaphthene	153	9.200	9.208	(1.003)	1317029	26.5868	26.587
83	2,4-Dinitrophenol	184	9.200	9.208	(1.003)	407727	50.7511	50.751
85	4-Nitrophenol	109	9.248	9.251	(1.009)	358128	55.9649	55.965
86	Dibenzofuran	168	9.360	9.368	(1.021)	1801975	26.6139	26.614
87	2,4-Dinitrotoluene	165	9.317	9.331	(1.016)	416078	27.6777	27.678
91	2,3,5,6-Tetrachlorophenol	231	Compound Not Detected.					
88	2,3,4,6-Tetrachlorophenol	232	9.467	9.475	(1.033)	428999	27.4900	27.490
92	2-Naphthylamine	143	Compound Not Detected.					
93	Diethylphthalate	149	9.526	9.534	(1.039)	1359203	27.5088	27.509
94	Fluorene	166	9.675	9.689	(1.055)	1464607	26.9032	26.903
95	4-Chlorophenyl-phenylether	204	9.654	9.668	(1.053)	838111	27.5915	27.591
96	4-Nitroaniline	138	9.675	9.684	(1.055)	279497	24.9353	24.935
98	4,6-Dinitro-2-methylphenol	198	9.702	9.710	(0.919)	515676	53.1906	53.191
99	N-Nitrosodiphenylamine (1)	169	9.761	9.769	(0.925)	959299	27.1260	27.126
100	1,2-Diphenylhydrazine	77	9.804	9.812	(0.929)	1158948	25.5256	25.526
106	4-Bromophenyl-phenylether	248	10.113	10.122	(0.958)	489702	28.5300	28.530
107	Hexachlorobenzene	284	10.204	10.207	(0.967)	458128	28.4720	28.472
210	Atrazine	200	10.231	10.239	(0.969)	362387	26.7284	26.728
111	Pentachlorophenol	266	10.375	10.378	(0.983)	501389	46.3258	46.326
115	Phenanthrene	178	10.584	10.592	(1.003)	1979240	27.1411	27.141
116	Anthracene	178	10.632	10.640	(1.007)	1927591	26.6729	26.673
119	Carbazole	167	10.776	10.784	(1.021)	1628271	26.0317	26.032
120	Di-n-Butylphthalate	149	11.075	11.078	(1.049)	1973077	27.6773	27.677
123	Fluoranthene	202	11.903	11.911	(1.127)	2248973	27.7695	27.769
124	Benzidine	184	12.026	12.040	(0.850)	139707	6.08557	6.0856
125	Pyrene	202	12.208	12.216	(0.863)	2220773	26.9645	26.964
131	Butylbenzylphthalate	149	13.068	13.081	(0.924)	843891	29.9962	29.996
135	3,3'-Dichlorobenzidine	252	14.051	14.064	(0.993)	649903	26.1770	26.177

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ng)
136 Benzo(a)Anthracene	228	14.131	14.144	(0.999)	2023075	27.0797	27.080
137 Chrysene	228	14.195	14.214	(1.003)	1877842	28.0781	28.078
139 bis(2-ethylhexyl)Phthalate	149	14.083	14.096	(0.995)	1117602	29.9038	29.904
140 Di-n-octylphthalate	149	15.391	15.410	(0.901)	1917584	27.1693	27.169
141 Benzo(b)fluoranthene	252	16.289	16.308	(0.953)	1941370	24.4261	24.426
142 Benzo(k)fluoranthene	252	16.348	16.372	(0.957)	1937824	24.4493	24.449
143 7,12-dimethylbenz[a]anthracen	256	Compound Not Detected.					
146 Benzo(a)pyrene	252	16.978	17.002	(0.993)	1777563	25.3901	25.390
149 Indeno(1,2,3-cd)pyrene	276	19.334	19.374	(1.131)	1899821	26.3563	26.356
150 Dibenz(a,h)anthracene	278	19.366	19.396	(1.133)	1686824	27.7711	27.771
151 Benzo(g,h,i)perylene	276	19.954	19.983	(1.168)	1635523	27.3127	27.313
$ 154 Nitrobenzene-d5	82	6.807	6.820	(0.907)	611432	23.8241	23.824
$ 155 2-Fluorobiphenyl	172	8.516	8.530	(0.929)	1554319	25.6380	25.638
$ 156 Terphenyl-d14	244	12.362	12.376	(0.874)	1950755	31.7664	31.766
$ 157 Phenol-d5	99	5.909	5.923	(0.943)	743196	25.2826	25.282
$ 158 2-Fluorophenol	112	4.883	4.892	(0.779)	646353	25.8344	25.834
$ 159 2,4,6-Tribromophenol	330	9.900	9.913	(0.938)	173247	30.2793	30.279

QC Flag Legend

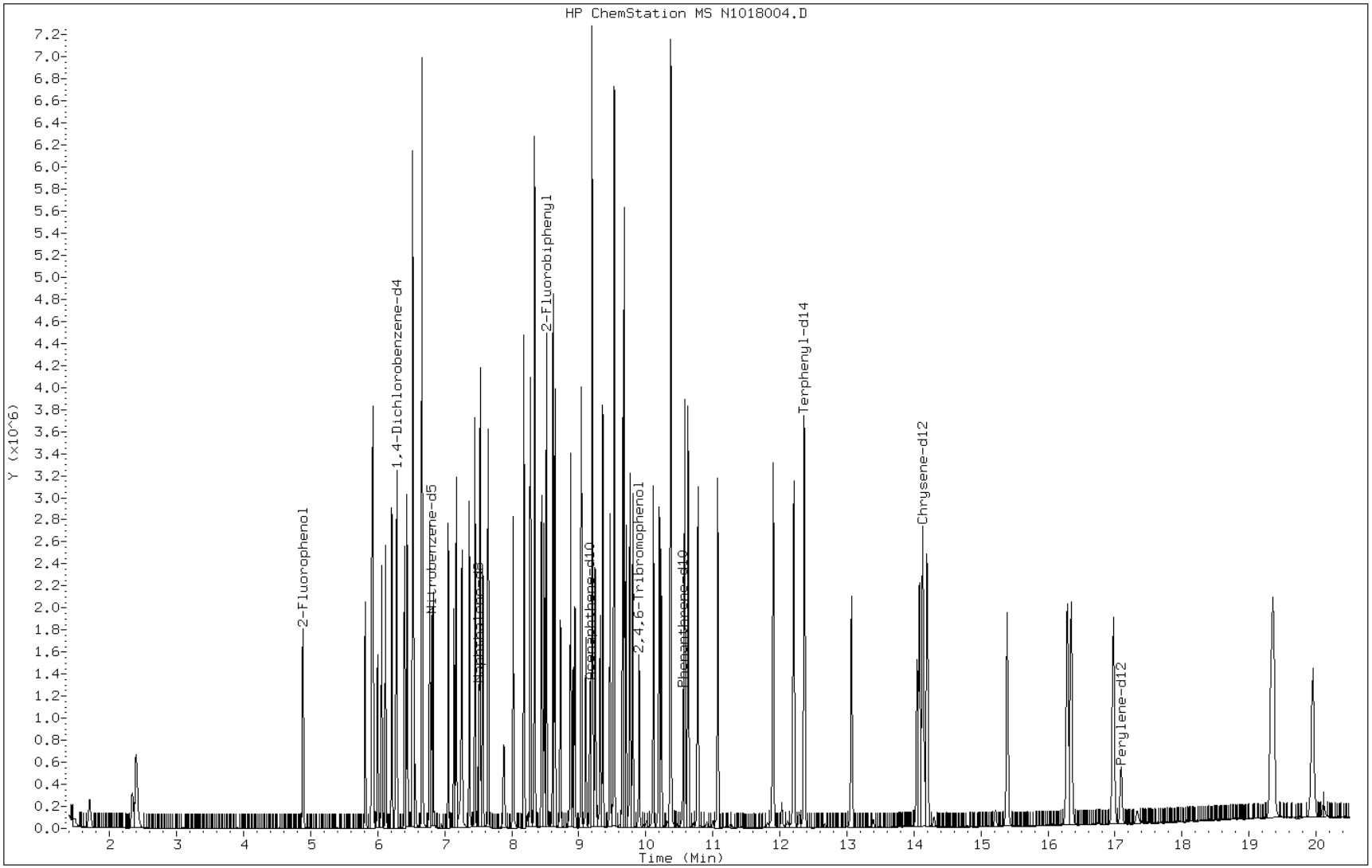
M - Compound response manually integrated.

Data File: N1018004.D

Date: 18-OCT-2013 13:14

Client ID: Instrument: 733.i

Sample Info: LCSD 180-86943/3-A Operator: 3200



Manual Integration Report

Data File: N1018004.D
Inj. Date and Time: 18-OCT-2013 13:14
Instrument ID: 733.i
Client ID:
Compound: 31 2,2'-oxybis(1-Chloropropane)
CAS #: 108-60-1
Report Date: 10/19/2013

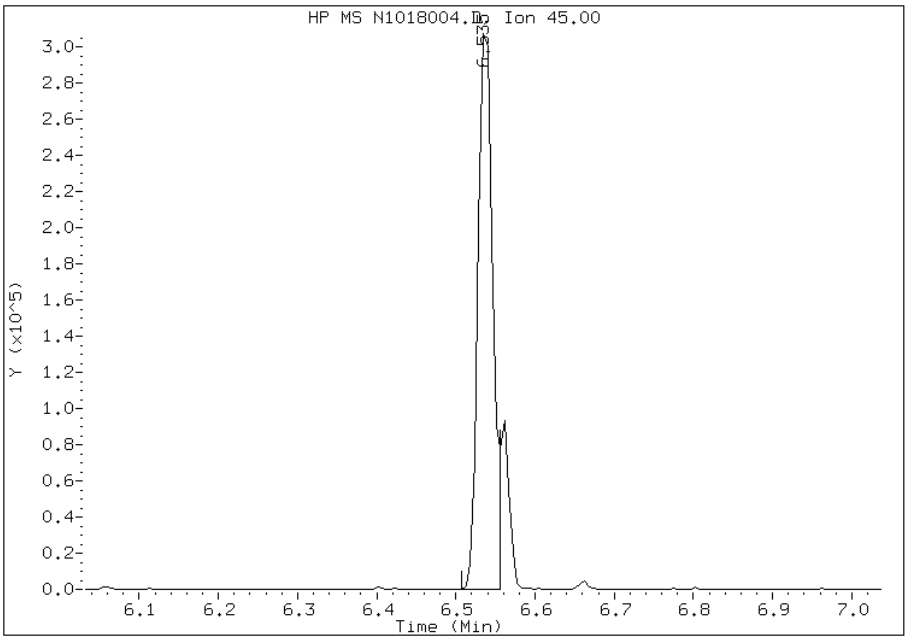
Processing Integration Results

RT: 6.53

Response: 404280

Amount: 17

Conc: 17



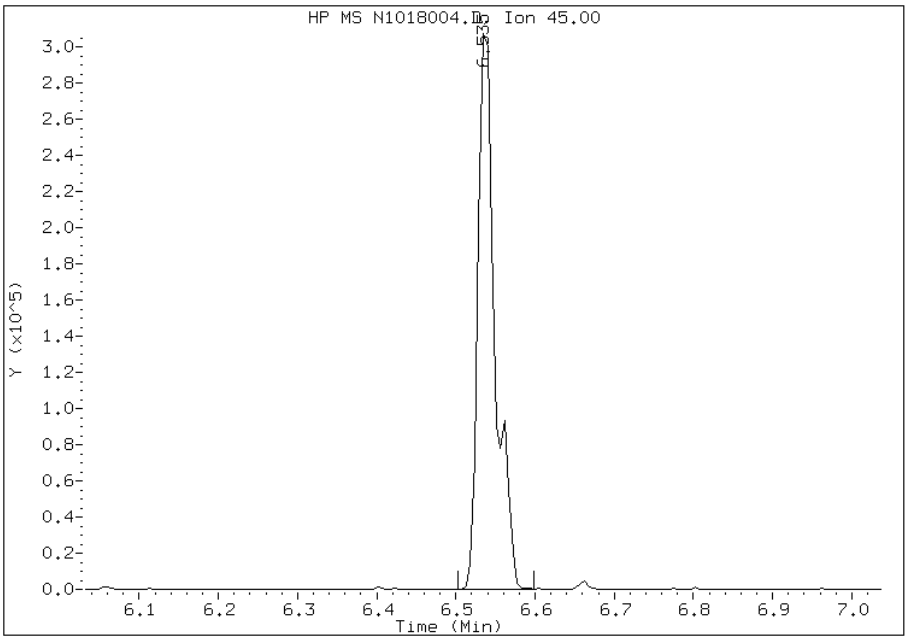
Manual Integration Results

RT: 6.53

Response: 460631

Amount: 20

Conc: 20



Manually Integrated By: piccolinov
Modification Date: 19-Oct-2013 05:47
Manual Integration Reason: Poor Chromatography

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-02-20131009 MS | Lab Sample ID: 180-26012-1 MS

Matrix: Water | Lab File ID: N1017008.D

Analysis Method: 8270D | Date Collected: 10/09/2013 11:15

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1030(mL) | Date Analyzed: 10/17/2013 15:04

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	114		1.9	0.14
208-96-8	Acenaphthylene	111		1.9	0.15
120-12-7	Anthracene	113		1.9	0.15
56-55-3	Benzo[a]anthracene	115		1.9	0.14
50-32-8	Benzo[a]pyrene	83.0		1.9	0.13
205-99-2	Benzo[b]fluoranthene	80.0		1.9	0.15
191-24-2	Benzo[g,h,i]perylene	106		1.9	0.15
207-08-9	Benzo[k]fluoranthene	76.9		1.9	0.53
117-81-7	Bis(2-ethylhexyl) phthalate	124		19	12
108-60-1	2,2'-oxybis[1-chloropropane]	80.8		1.9	0.19
101-55-3	4-Bromophenyl phenyl ether	112		9.7	0.62
85-68-7	Butyl benzyl phthalate	112		9.7	1.4
86-74-8	Carbazole	134		1.9	0.15
106-47-8	4-Chloroaniline	82.7		9.7	0.86
91-58-7	2-Chloronaphthalene	99.6		1.9	0.15
7005-72-3	4-Chlorophenyl phenyl ether	119		9.7	0.49
218-01-9	Chrysene	130		1.9	0.14
53-70-3	Dibenz(a,h)anthracene	108		1.9	0.15
132-64-9	Dibenzofuran	114		9.7	0.60
84-74-2	Di-n-butyl phthalate	119		9.7	1.2
91-94-1	3,3'-Dichlorobenzidine	8.82	J	9.7	1.1
84-66-2	Diethyl phthalate	131		9.7	1.4
131-11-3	Dimethyl phthalate	125		9.7	0.74
121-14-2	2,4-Dinitrotoluene	137		9.7	0.52
606-20-2	2,6-Dinitrotoluene	130		9.7	0.77
117-84-0	Di-n-octyl phthalate	81.9		9.7	2.0
206-44-0	Fluoranthene	125		1.9	0.16
86-73-7	Fluorene	116		1.9	0.21
118-74-1	Hexachlorobenzene	117		1.9	0.18
87-68-3	Hexachlorobutadiene	101		1.9	0.16
77-47-4	Hexachlorocyclopentadiene	71.8		9.7	0.50
67-72-1	Hexachloroethane	90.6		9.7	0.61
193-39-5	Indeno[1,2,3-cd]pyrene	102		1.9	0.19
78-59-1	Isophorone	114		9.7	0.63

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-02-20131009 MS | Lab Sample ID: 180-26012-1 MS

Matrix: Water | Lab File ID: N1017008.D

Analysis Method: 8270D | Date Collected: 10/09/2013 11:15

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1030(mL) | Date Analyzed: 10/17/2013 15:04

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
91-57-6	2-Methylnaphthalene	106		1.9	0.12
91-20-3	Naphthalene	104		1.9	0.14
88-74-4	2-Nitroaniline	125		49	3.4
99-09-2	3-Nitroaniline	111		49	3.1
100-01-6	4-Nitroaniline	126		49	1.7
100-02-7	4-Nitrophenol	296		49	6.3
98-95-3	Nitrobenzene	105		19	0.82
621-64-7	N-Nitrosodi-n-propylamine	105		1.9	0.30
86-30-6	N-Nitrosodiphenylamine	121		9.7	0.83
85-01-8	Phenanthrene	112		1.9	0.41
129-00-0	Pyrene	97.0		1.9	0.15
59-50-7	4-Chloro-3-methylphenol	120		9.7	0.73
95-57-8	2-Chlorophenol	104		9.7	1.6
95-48-7	2-Methylphenol	103		9.7	0.84
106-44-5	Methylphenol, 3 & 4	107		9.7	0.88
120-83-2	2,4-Dichlorophenol	112		1.9	0.32
105-67-9	2,4-Dimethylphenol	254		9.7	0.83
51-28-5	2,4-Dinitrophenol	274		49	6.0
534-52-1	4,6-Dinitro-2-methylphenol	282		49	2.1
88-75-5	2-Nitrophenol	113		9.7	1.7
87-86-5	Pentachlorophenol	303		9.7	0.64
108-95-2	Phenol	90.1		1.9	0.56
95-95-4	2,4,5-Trichlorophenol	122		9.7	1.5
88-06-2	2,4,6-Trichlorophenol	121		9.7	1.7
98-86-2	Acetophenone	99.6		9.7	0.78
1912-24-9	Atrazine	77.3		9.7	0.87
100-52-7	Benzaldehyde	99.9		9.7	1.5
92-52-4	1,1'-Biphenyl	108		9.7	0.40
105-60-2	Caprolactam	142		49	12
111-91-1	Bis(2-chloroethoxy)methane	102		9.7	0.56
111-44-4	Bis(2-chloroethyl)ether	101		1.9	0.24

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-02-20131009 MS Lab Sample ID: 180-26012-1 MS

Matrix: Water Lab File ID: N1017008.D

Analysis Method: 8270D Date Collected: 10/09/2013 11:15

Extract. Method: 3520C Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1030(mL) Date Analyzed: 10/17/2013 15:04

Con. Extract Vol.: 10.0(mL) Dilution Factor: 1

Injection Volume: 2(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	53		37-104
4165-62-2	Phenol-d5 (Surr)	48		30-102
321-60-8	2-Fluorobiphenyl	47		35-108
118-79-6	2,4,6-Tribromophenol (Surr)	64		33-122
367-12-4	2-Fluorophenol (Surr)	49		26-100
1718-51-0	Terphenyl-d14 (Surr)	30		25-130

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN101713D.b\N1017008.D
Lab Smp Id: 180-26012-B-1-A MS
Inj Date : 17-OCT-2013 15:04
Operator : 3200 Inst ID: 733.i
Smp Info : 180-26012-B-1-A MS
Misc Info : TN101713D.b,T8270d.m,padepi.sub
Comment :
Method : \\PITSVR06\D\chem\733.i\TN101713D.b\T8270d.m
Meth Date : 17-Oct-2013 11:57 piccolinov Quant Type: ISTD
Cal Date : 09-OCT-2013 08:22 Cal File: N1009IC8.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: padepi.sub
Target Version: 4.14
Processing Host: PITPC-502

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
* 1	1,4-Dichlorobenzene-d4	152	6.271	6.271	(1.000)	114719	8.00000	
* 2	Naphthalene-d8	136	7.505	7.505	(1.000)	385652	8.00000	
* 3	Acenaphthene-d10	164	9.150	9.156	(1.000)	226083	8.00000	
* 4	Phenanthrene-d10	188	10.534	10.540	(1.000)	391216	8.00000	(M)
* 5	Chrysene-d12	240	14.097	14.113	(1.000)	505505	8.00000	
* 6	Perylene-d12	264	17.041	17.062	(1.000)	668380	8.00000	(M)
198	1,4-Dioxane	88	1.735	1.693	(0.277)	121337	16.2552	16.255
10	N-Nitrosodimethylamine	74	2.382	2.318	(0.380)	174701	18.8126	18.813
9	Pyridine	79	2.483	2.387	(0.396)	27095	1.60102	1.6010(M)
16	Methyl methanesulfonate	80	Compound Not Detected.					
206	Benzaldehyde	77	5.827	5.817	(0.929)	287235	20.5838	20.584
21	Aniline	93	5.945	5.935	(0.948)	217679	8.66577	8.6658
22	Phenol	94	5.934	5.924	(0.946)	442486	18.5576	18.558
23	bis(2-Chloroethyl)ether	93	6.009	6.004	(0.958)	314035	20.7387	20.739
24	2-Chlorophenol	128	6.068	6.063	(0.968)	401120	21.3519	21.352
26	1,3-Dichlorobenzene	146	6.217	6.218	(0.991)	421864	18.6979	18.698
27	1,4-Dichlorobenzene	146	6.292	6.293	(1.003)	438275	18.9764	18.976
28	1,2-Dichlorobenzene	146	6.442	6.442	(1.027)	415462	19.2404	19.240
217	Indene	116	6.527	6.528	(1.041)	621977	19.5581	19.558
29	Benzyl Alcohol	108	6.410	6.405	(1.022)	205202	19.6480	19.648
30	2-Methylphenol	108	6.522	6.522	(1.040)	335913	21.2971	21.297
31	2,2'-oxybis(1-Chloropropane)	45	6.538	6.538	(1.043)	275304	16.6456	16.646(M)
37	Acetophenone	105	6.661	6.661	(1.062)	528659	20.5232	20.523
32	N-Nitroso-di-n-propylamine	70	6.661	6.661	(1.062)	249099	21.6628	21.663
192	4-Methylphenol	108	6.666	6.667	(1.063)	365728	22.1207	22.121
34	Hexachloroethane	117	6.778	6.779	(1.081)	161446	18.6592	18.659
35	Nitrobenzene	77	6.826	6.827	(0.910)	377343	21.7234	21.723
36	N-Nitrosopyrrolidine	100	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
41 Isophorone	82	7.056	7.051	(0.940)	656628	23.5530	23.553
42 2-Nitrophenol	139	7.136	7.137	(0.951)	220560	23.3447	23.345
43 2,4-Dimethylphenol	107	7.168	7.169	(0.955)	795551	52.2281	52.228
44 bis(2-Chloroethoxy)methane	93	7.248	7.254	(0.966)	363266	20.9677	20.968
48 2,4-Dichlorophenol	162	7.366	7.366	(0.981)	362196	23.0494	23.049
49 Benzoic Acid	122	7.243	7.238	(0.965)	153845	22.1032	22.103(M)
50 1,2,4-Trichlorobenzene	180	7.446	7.452	(0.992)	413793	21.5611	21.561
51 Naphthalene	128	7.521	7.527	(1.002)	1091697	21.3389	21.339
52 4-Chloroaniline	127	7.564	7.564	(1.008)	349977	17.0407	17.041
54 2,6-Dichlorophenol	162	Compound Not Detected.					
56 Hexachlorobutadiene	225	7.644	7.649	(1.019)	269610	20.8521	20.852
208 Caprolactam	113	7.884	7.863	(1.051)	107943	29.3446	29.345
59 4-Chloro-3-Methylphenol	107	8.007	8.013	(1.067)	343879	24.7805	24.780
62 2-Methylnaphthalene	142	8.173	8.178	(1.089)	780145	21.8821	21.882
63 1-Methylnaphthalene	142	8.269	8.274	(1.102)	706871	21.6738	21.674
64 Hexachlorocyclopentadiene	237	8.327	8.333	(0.910)	217145	14.7923	14.792
65 1,2,4,5-Tetrachlorobenzene	216	8.333	8.339	(0.911)	468551	21.8649	21.865
66 2,4,6-Trichlorophenol	196	8.429	8.435	(0.921)	296608	24.9840	24.984
67 2,4,5-Trichlorophenol	196	8.466	8.472	(0.925)	313327	25.1082	25.108
209 1,1'-Biphenyl	154	8.600	8.606	(0.940)	968486	22.1871	22.187
70 2-Chloronaphthalene	162	8.632	8.638	(0.943)	764998	20.5125	20.512
73 2-Nitroaniline	65	8.712	8.718	(0.952)	211280	25.8522	25.852
76 Dimethylphthalate	163	8.862	8.867	(0.968)	932283	25.6610	25.661
78 2,6-Dinitrotoluene	165	8.926	8.932	(0.975)	215491	26.7292	26.729
79 Acenaphthylene	152	9.022	9.028	(0.986)	1192732	22.7950	22.795
81 3-Nitroaniline	138	9.086	9.092	(0.993)	184050	22.8793	22.879(M)
82 Acenaphthene	153	9.182	9.188	(1.004)	805527	23.5151	23.515
83 2,4-Dinitrophenol	184	9.182	9.188	(1.004)	317117	56.3784	56.378
85 4-Nitrophenol	109	9.230	9.225	(1.009)	269992	61.0135	61.013
86 Dibenzofuran	168	9.337	9.343	(1.020)	1094948	23.3857	23.386
87 2,4-Dinitrotoluene	165	9.300	9.306	(1.016)	292734	28.1595	28.160
91 2,3,5,6-Tetrachlorophenol	231	Compound Not Detected.					
88 2,3,4,6-Tetrachlorophenol	232	9.449	9.455	(1.033)	287434	26.6351	26.635
92 2-Naphthylamine	143	Compound Not Detected.					
93 Diethylphthalate	149	9.508	9.509	(1.039)	919672	26.9164	26.916
94 Fluorene	166	9.658	9.663	(1.055)	901486	23.9464	23.946
95 4-Chlorophenyl-phenylether	204	9.636	9.642	(1.053)	514567	24.4970	24.497
96 4-Nitroaniline	138	9.658	9.658	(1.055)	201634	26.0135	26.014(M)
98 4,6-Dinitro-2-methylphenol	198	9.684	9.685	(0.919)	425159	58.0217	58.022(M)
99 N-Nitrosodiphenylamine (1)	169	9.743	9.749	(0.925)	660567	24.8593	24.859(M)
100 1,2-Diphenylhydrazine	77	9.781	9.792	(0.928)	769455	22.5546	22.555(M)
106 4-Bromophenyl-phenylether	248	10.090	10.096	(0.958)	298384	23.1358	23.136(M)
107 Hexachlorobenzene	284	10.176	10.187	(0.966)	292638	24.2048	24.205(M)
210 Atrazine	200	10.219	10.214	(0.970)	162299	15.9315	15.931(M)
111 Pentachlorophenol	266	10.347	10.358	(0.982)	522757	62.4387	62.439(M)
115 Phenanthrene	178	10.555	10.566	(1.002)	1264631	23.0799	23.080(M)
116 Anthracene	178	10.609	10.614	(1.007)	1259056	23.1867	23.187(M)
119 Carbazole	167	10.758	10.759	(1.021)	1297408	27.6054	27.605(M)
120 Di-n-Butylphthalate	149	11.047	11.052	(1.049)	1313981	24.5306	24.531(M)
123 Fluoranthene	202	11.869	11.875	(1.127)	1568365	25.7733	25.773(M)
124 Benzidine	184	Compound Not Detected.					
125 Pyrene	202	12.168	12.180	(0.863)	1603511	19.9885	19.988
131 Butylbenzylphthalate	149	13.018	13.040	(0.923)	632720	23.0894	23.089
135 3,3'-Dichlorobenzidine	252	14.017	14.012	(0.994)	43941	1.81703	1.8170(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
136 Benzo(a)Anthracene	228	14.070	14.097	(0.998)	1724836	23.7028	23.703
137 Chrysene	228	14.140	14.167	(1.003)	1748161	26.8356	26.836
139 bis(2-ethylhexyl)Phthalate	149	14.022	14.049	(0.995)	932799	25.6240	25.624
140 Di-n-octylphthalate	149	15.336	15.364	(0.900)	1699406	16.8772	16.877
141 Benzo(b)fluoranthene	252	16.245	16.261	(0.953)	1918156	16.4891	16.489
142 Benzo(k)fluoranthene	252	16.298	16.314	(0.956)	1836609	15.8320	15.832
143 7,12-dimethylbenz[a]anthracen	256	Compound Not Detected.					
146 Benzo(a)pyrene	252	16.928	16.945	(0.993)	1752235	17.1001	17.100
149 Indeno(1,2,3-cd)pyrene	276	19.300	19.306	(1.133)	2212218	20.9684	20.968
150 Dibenz(a,h)anthracene	278	19.322	19.333	(1.134)	1980166	22.2737	22.274
151 Benzo(g,h,i)perylene	276	19.909	19.910	(1.168)	1921441	21.9231	21.923
$ 154 Nitrobenzene-d5	82	6.810	6.811	(0.907)	364293	21.0943	21.094
$ 155 2-Fluorobiphenyl	172	8.504	8.510	(0.929)	796503	18.9989	18.999
$ 156 Terphenyl-d14	244	12.318	12.340	(0.874)	721027	12.0542	12.054
$ 157 Phenol-d5	99	5.918	5.913	(0.944)	405737	19.3449	19.345
$ 158 2-Fluorophenol	112	4.903	4.888	(0.782)	346480	19.4093	19.409
$ 159 2,4,6-Tribromophenol	330	9.882	9.888	(0.938)	109710	25.5192	25.519(M)

QC Flag Legend

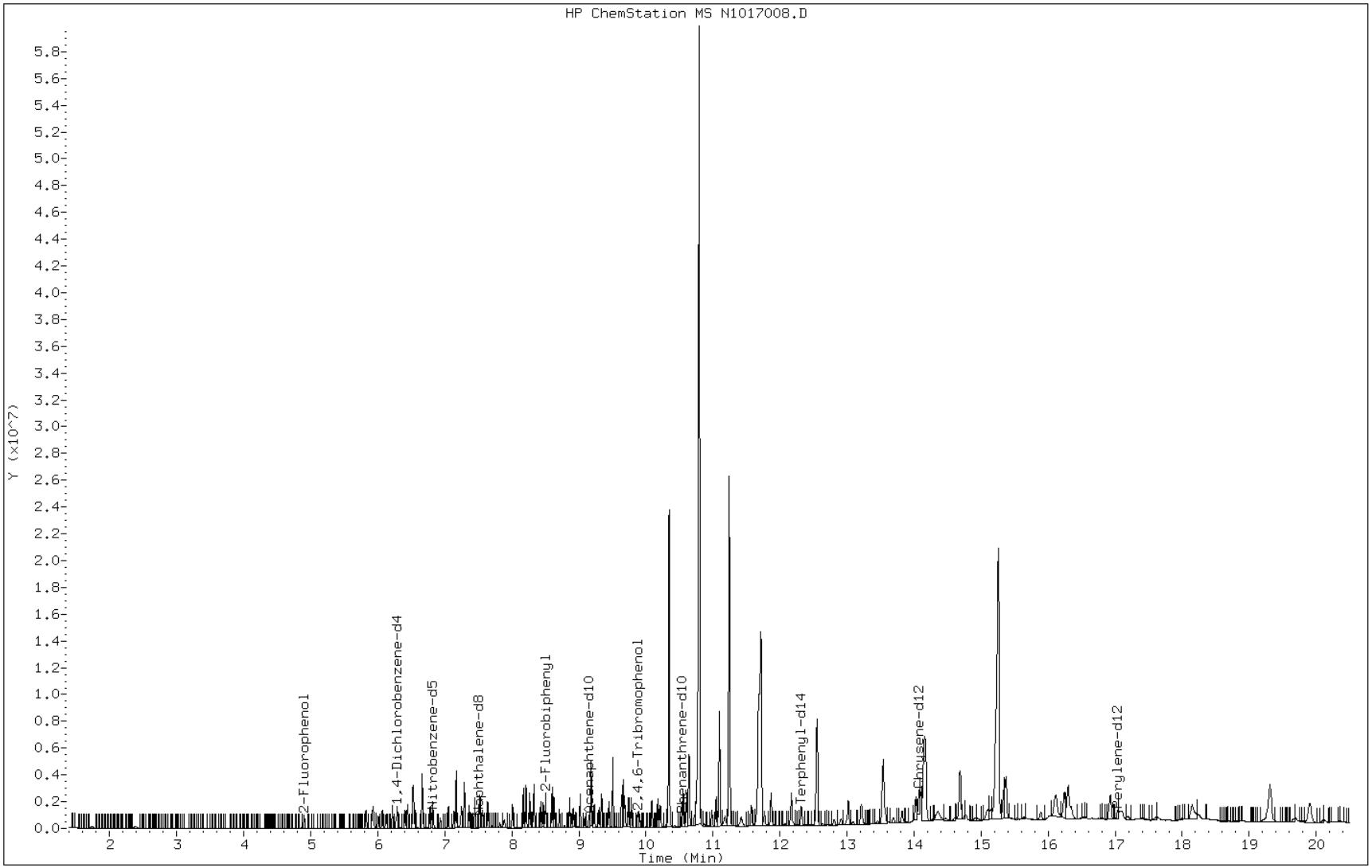
M - Compound response manually integrated.

Data File: N1017008.D

Date: 17-OCT-2013 15:04

Client ID: Instrument: 733.i

Sample Info: 180-26012-B-1-A MS Operator: 3200



Manual Integration Report

Data File: N1017008.D
Inj. Date and Time: 17-OCT-2013 15:04
Instrument ID: 733.i
Client ID:
Compound: 116 Anthracene
CAS #: 120-12-7
Report Date: 10/18/2013

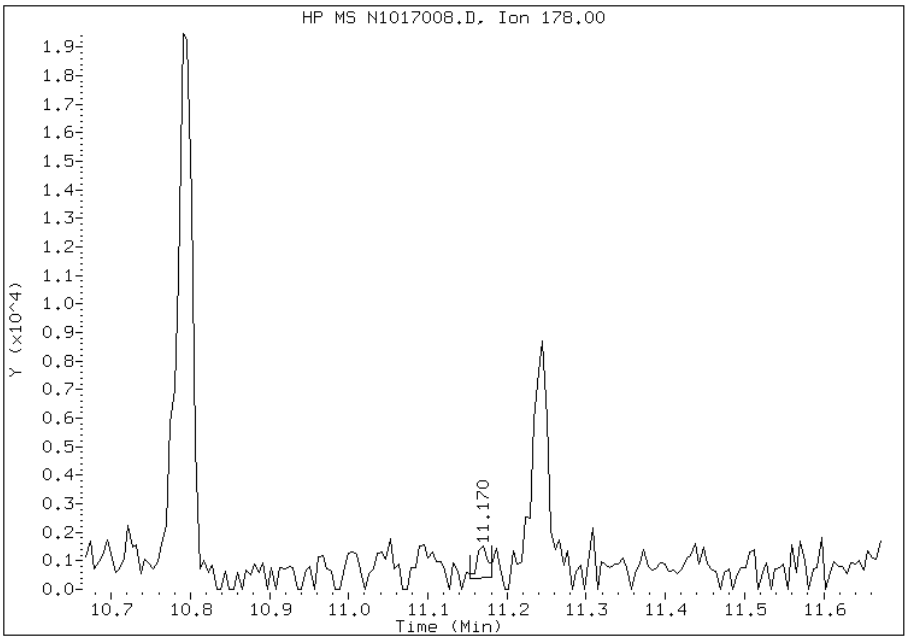
Processing Integration Results

RT: 11.17

Response: 1127

Amount: 0

Conc: 0



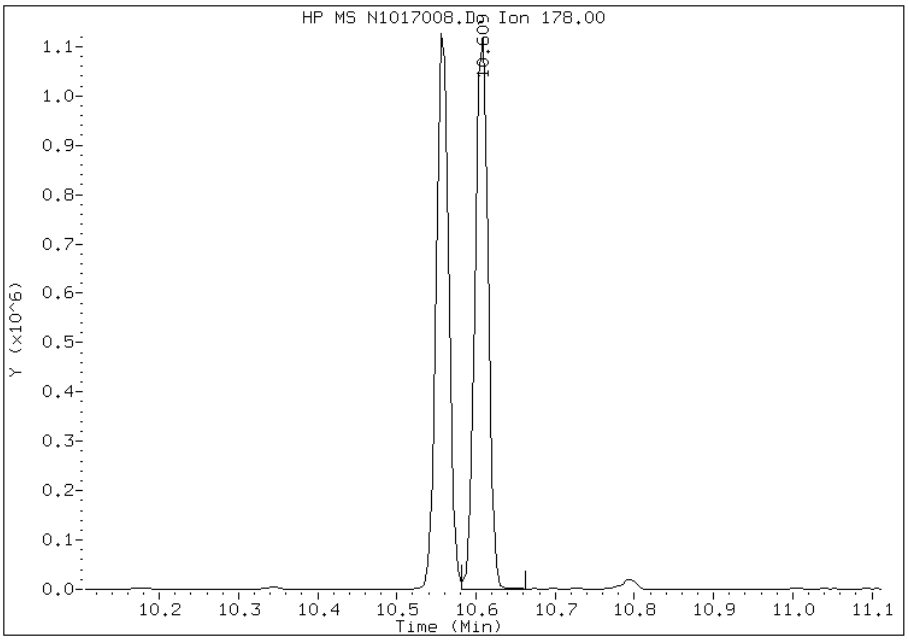
Manual Integration Results

RT: 10.61

Response: 1259056

Amount: 23

Conc: 23



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 05:57
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N1017008.D
Inj. Date and Time: 17-OCT-2013 15:04
Instrument ID: 733.i
Client ID:
Compound: 31 2,2'-oxybis(1-Chloropropane)
CAS #: 108-60-1
Report Date: 10/18/2013

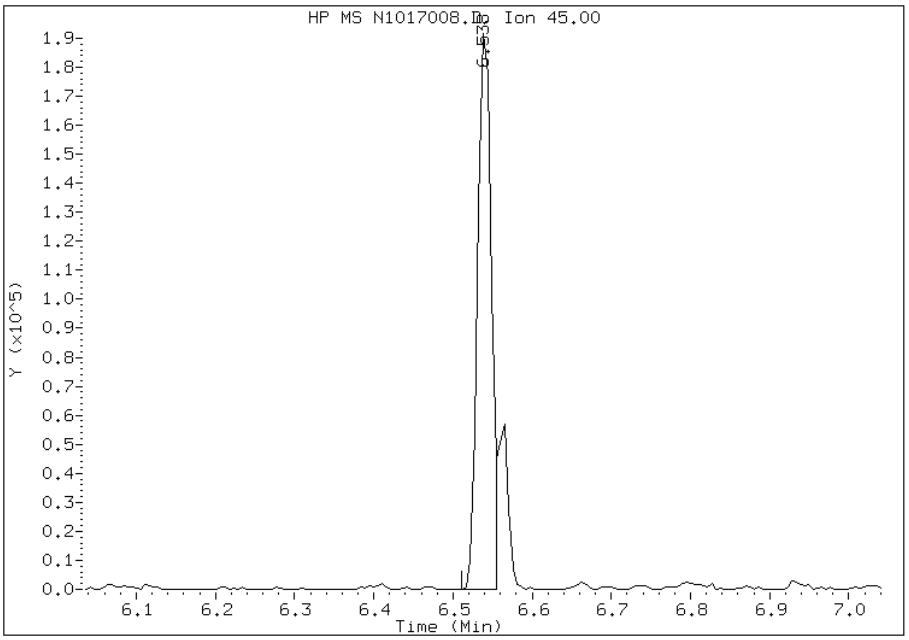
Processing Integration Results

RT: 6.54

Response: 228673

Amount: 14

Conc: 14



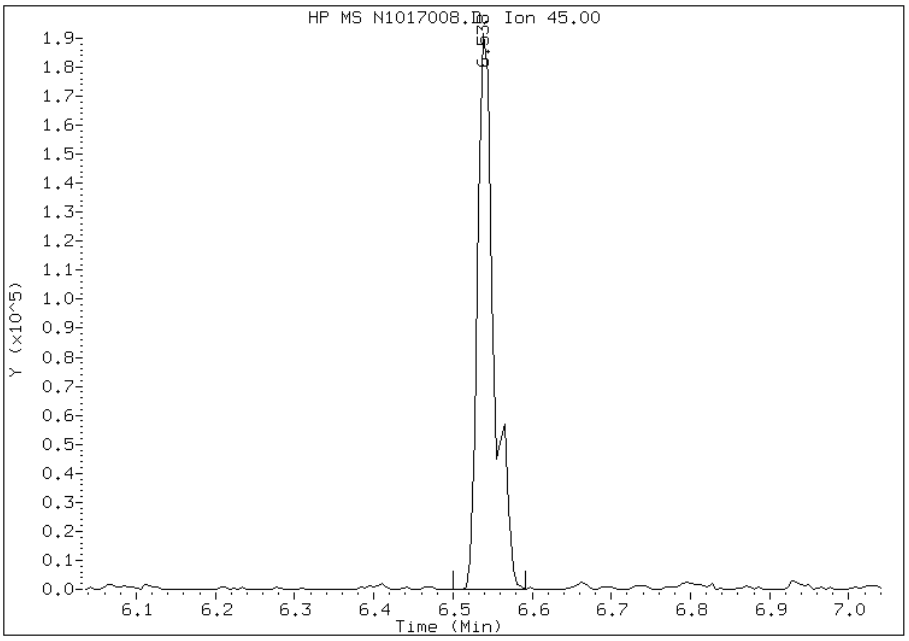
Manual Integration Results

RT: 6.54

Response: 275304

Amount: 17

Conc: 17



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 05:55
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1017008.D
Inj. Date and Time: 17-OCT-2013 15:04
Instrument ID: 733.i
Client ID:
Compound: 106 4-Bromophenyl-phenylether
CAS #: 101-55-3
Report Date: 10/18/2013

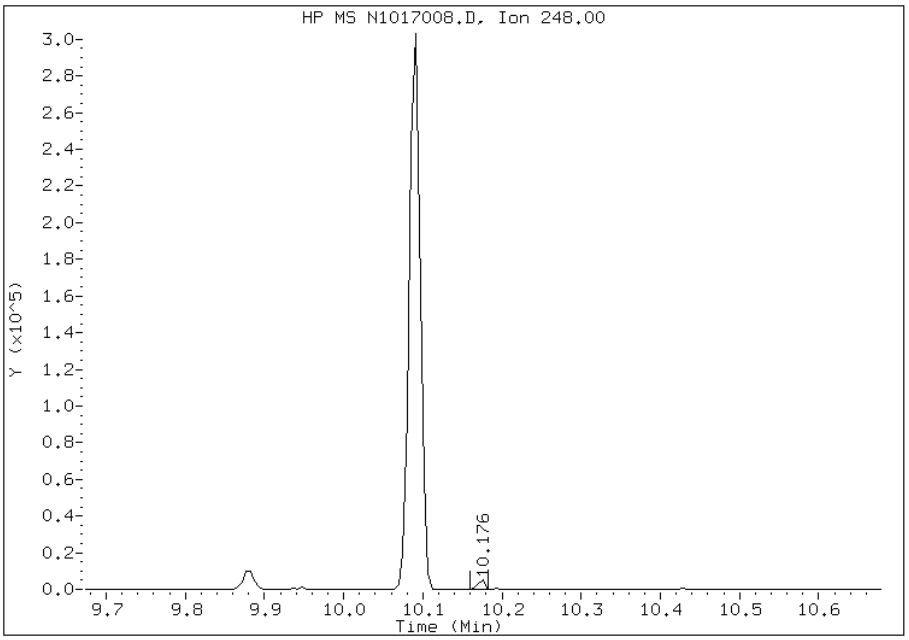
Processing Integration Results

RT: 10.18

Response: 3070

Amount: 0

Conc: 0



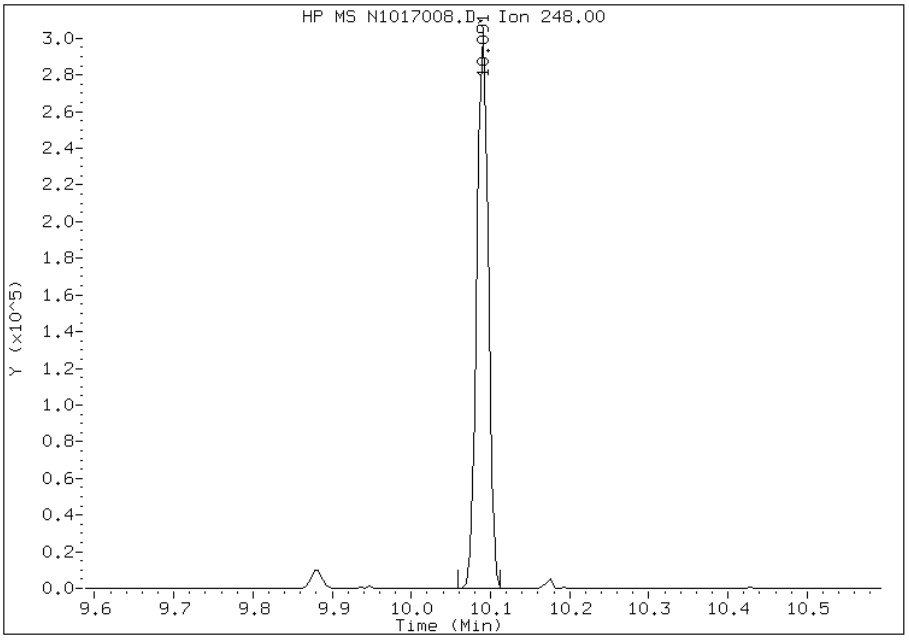
Manual Integration Results

RT: 10.09

Response: 298384

Amount: 23

Conc: 23



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 05:56
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N1017008.D
Inj. Date and Time: 17-OCT-2013 15:04
Instrument ID: 733.i
Client ID:
Compound: 119 Carbazole
CAS #: 86-74-8
Report Date: 10/18/2013

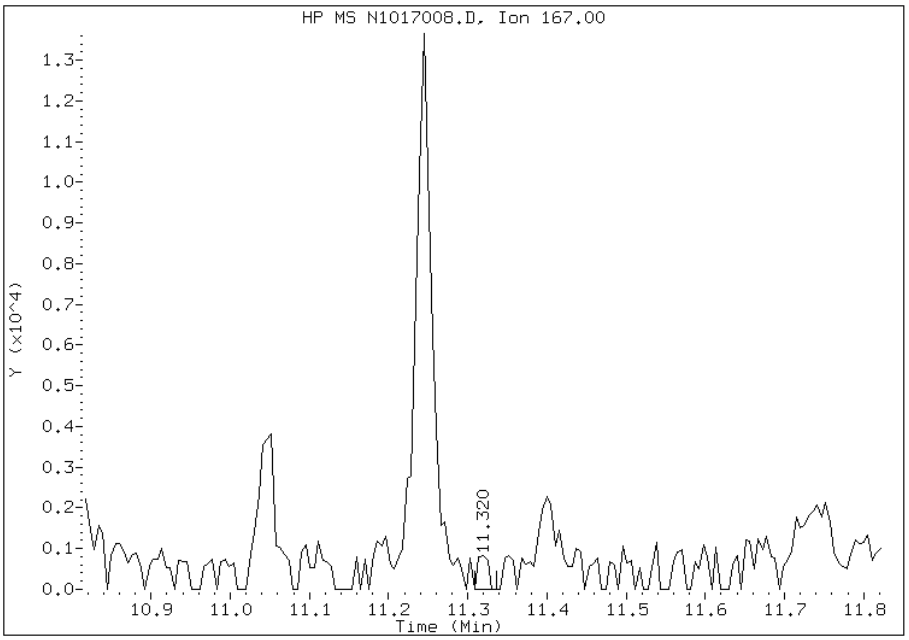
Processing Integration Results

RT: 11.32

Response: 749

Amount: 0

Conc: 0



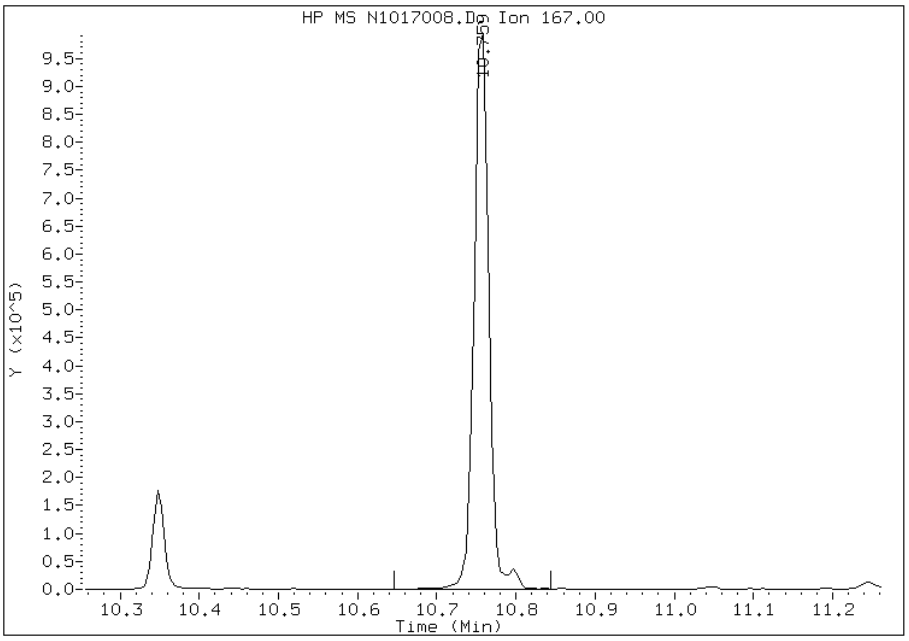
Manual Integration Results

RT: 10.76

Response: 1297408

Amount: 28

Conc: 28



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 05:57
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N1017008.D
Inj. Date and Time: 17-OCT-2013 15:04
Instrument ID: 733.i
Client ID:
Compound: 120 Di-n-Butylphthalate
CAS #: 84-74-2
Report Date: 10/18/2013

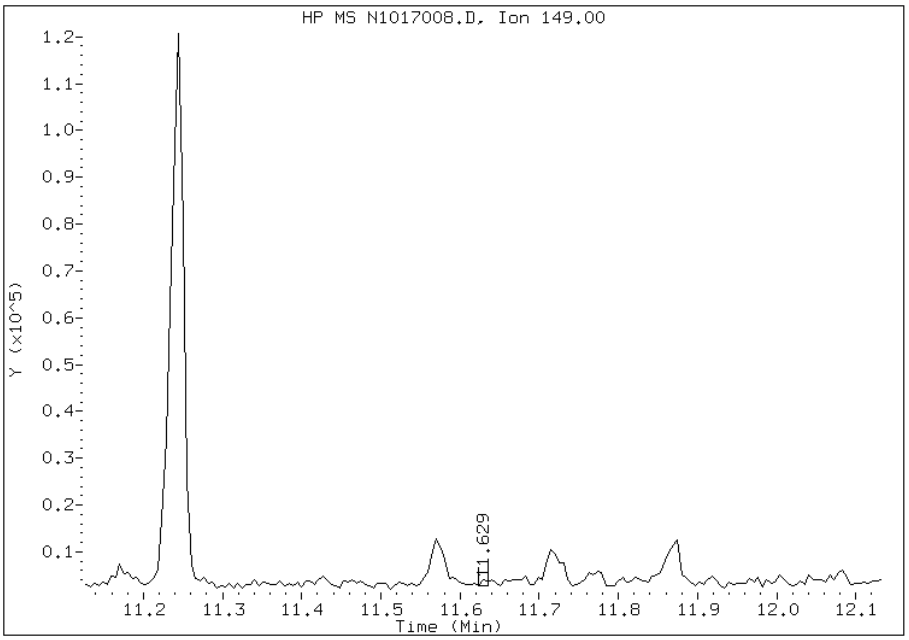
Processing Integration Results

RT: 11.63

Response: 693

Amount: 0

Conc: 0



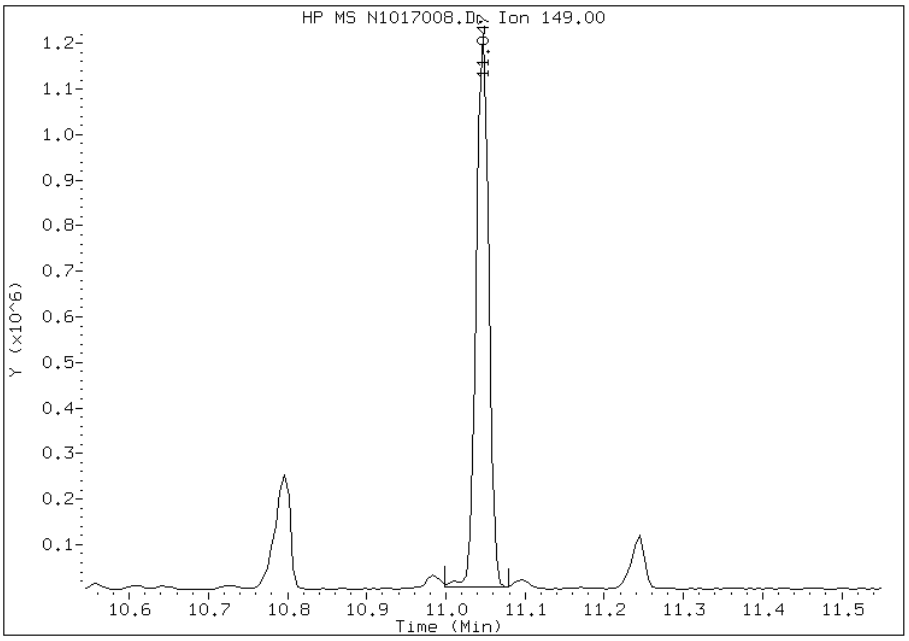
Manual Integration Results

RT: 11.05

Response: 1313981

Amount: 25

Conc: 25



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 05:57
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N1017008.D
Inj. Date and Time: 17-OCT-2013 15:04
Instrument ID: 733.i
Client ID:
Compound: 135 3,3'-Dichlorobenzidine
CAS #: 91-94-1
Report Date: 10/18/2013

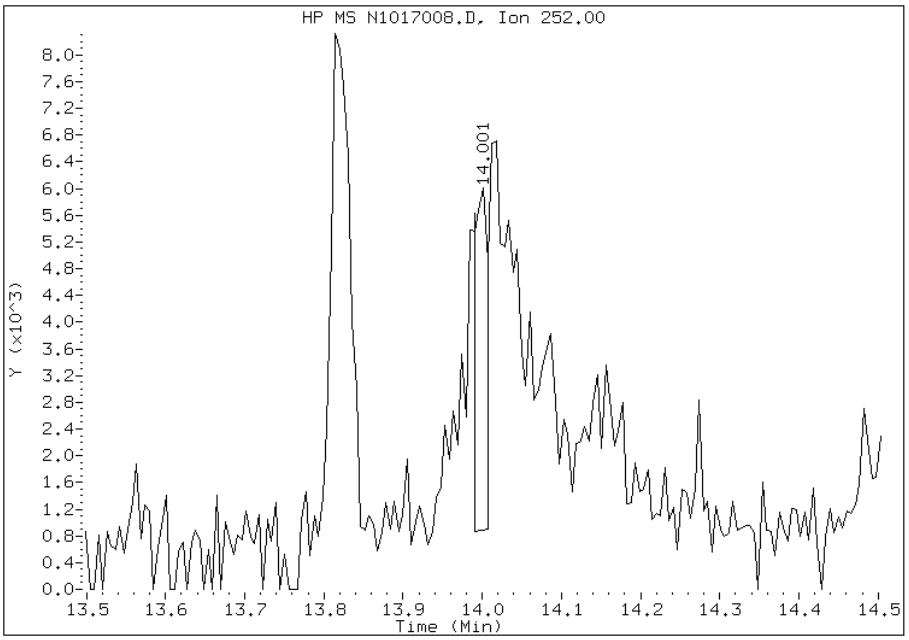
Processing Integration Results

RT: 14.00

Response: 5897

Amount: 0

Conc: 0



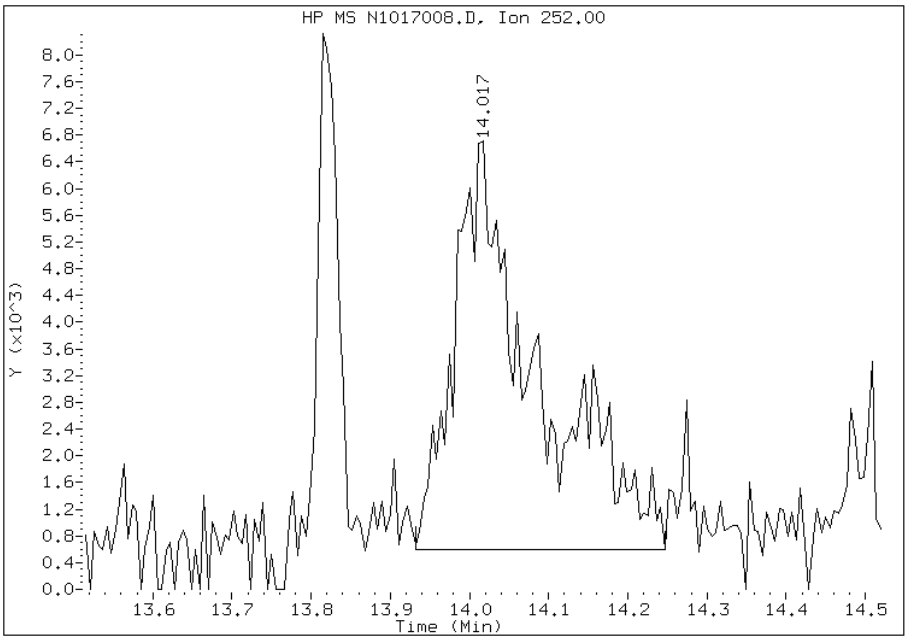
Manual Integration Results

RT: 14.02

Response: 43941

Amount: 2

Conc: 2



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 05:58
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N1017008.D
Inj. Date and Time: 17-OCT-2013 15:04
Instrument ID: 733.i
Client ID:
Compound: 123 Fluoranthene
CAS #: 206-44-0
Report Date: 10/18/2013

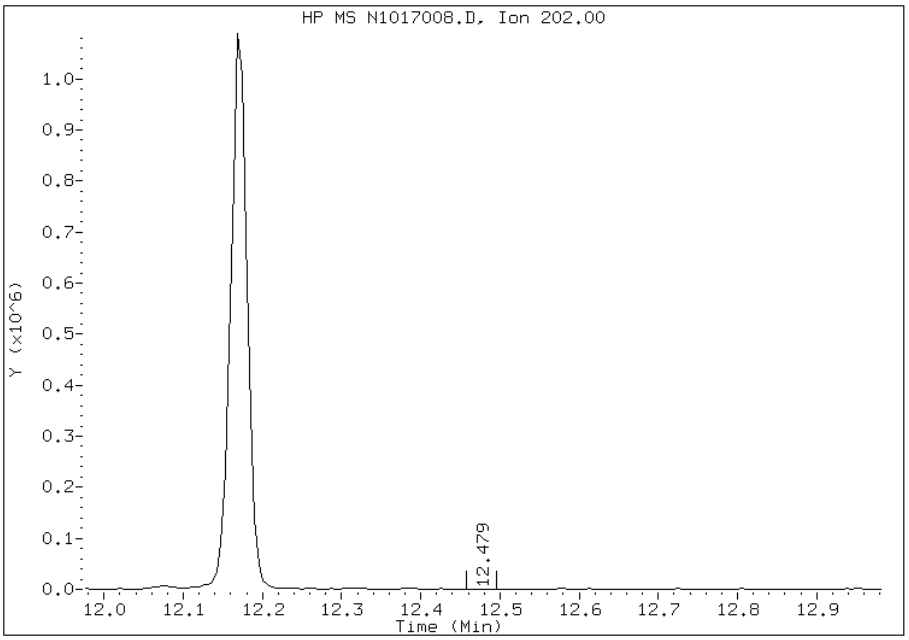
Processing Integration Results

RT: 12.48

Response: 1495

Amount: 0

Conc: 0



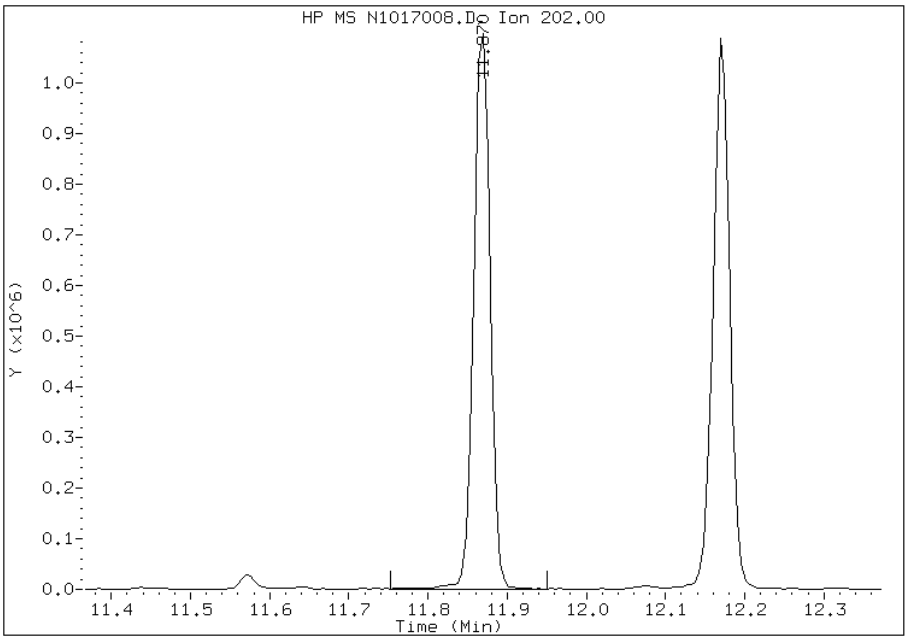
Manual Integration Results

RT: 11.87

Response: 1568365

Amount: 26

Conc: 26



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 05:58
Manual Integration Reason: Peak Not Found

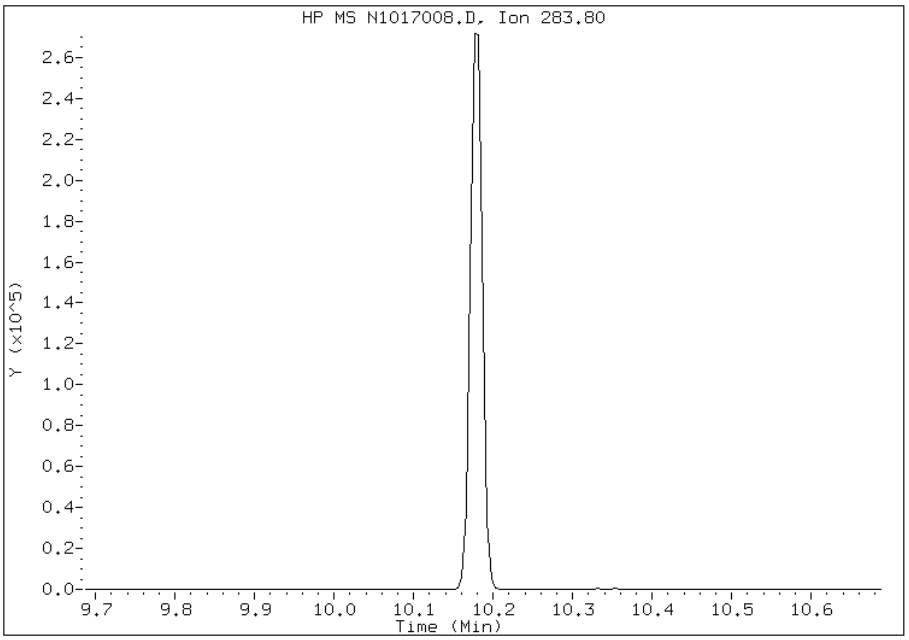
Manual Integration Report

Data File: N1017008.D
Inj. Date and Time: 17-OCT-2013 15:04
Instrument ID: 733.i
Client ID:
Compound: 107 Hexachlorobenzene
CAS #: 118-74-1
Report Date: 10/18/2013

Processing Integration Results

Not Detected

Expected RT: 10.19



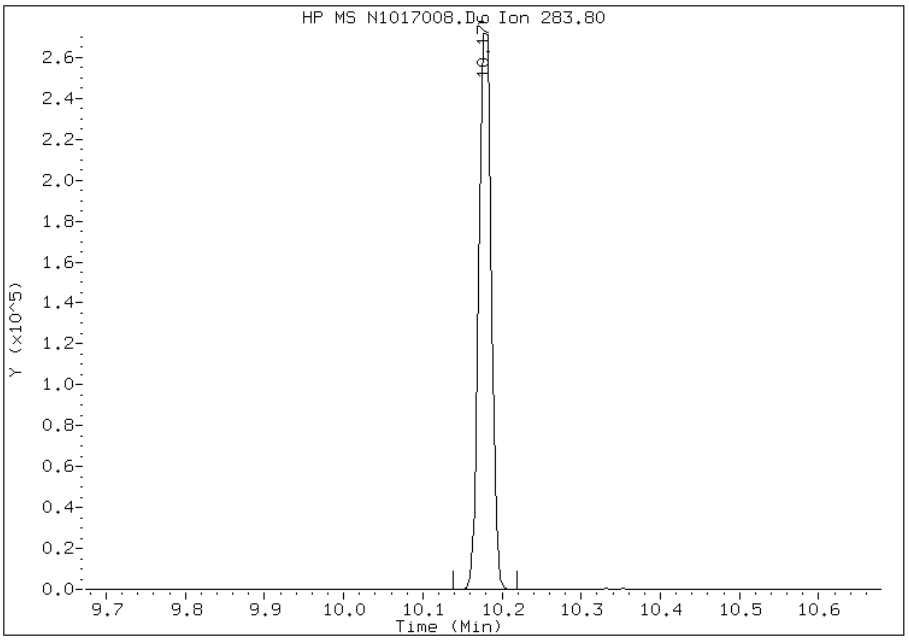
Manual Integration Results

RT: 10.18

Response: 292638

Amount: 24

Conc: 24



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 05:56
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N1017008.D
Inj. Date and Time: 17-OCT-2013 15:04
Instrument ID: 733.i
Client ID:
Compound: 81 3-Nitroaniline
CAS #: 99-09-2
Report Date: 10/18/2013

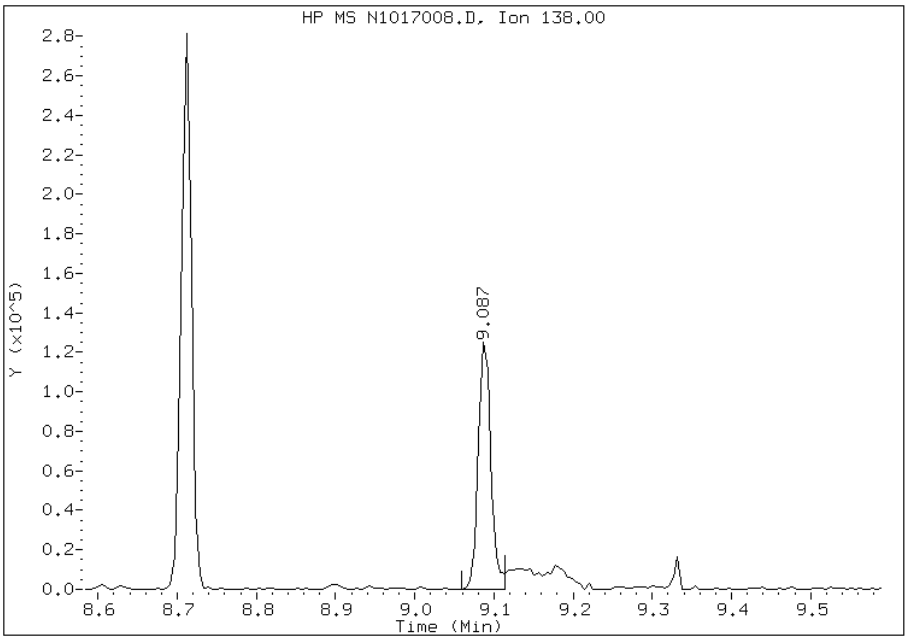
Processing Integration Results

RT: 9.09

Response: 135881

Amount: 17

Conc: 17



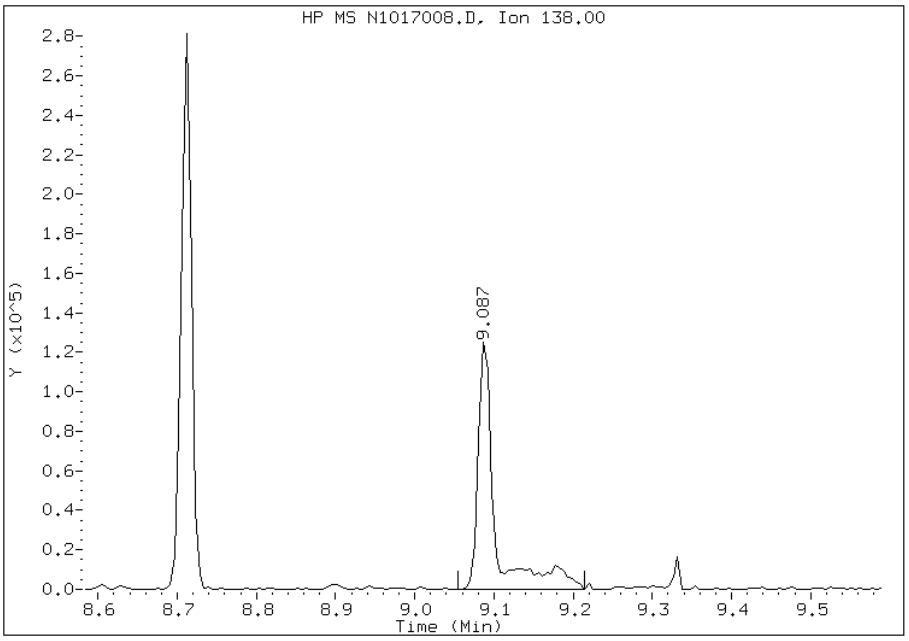
Manual Integration Results

RT: 9.09

Response: 184050

Amount: 23

Conc: 23



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 05:55
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1017008.D
Inj. Date and Time: 17-OCT-2013 15:04
Instrument ID: 733.i
Client ID:
Compound: 96 4-Nitroaniline
CAS #: 100-01-6
Report Date: 10/18/2013

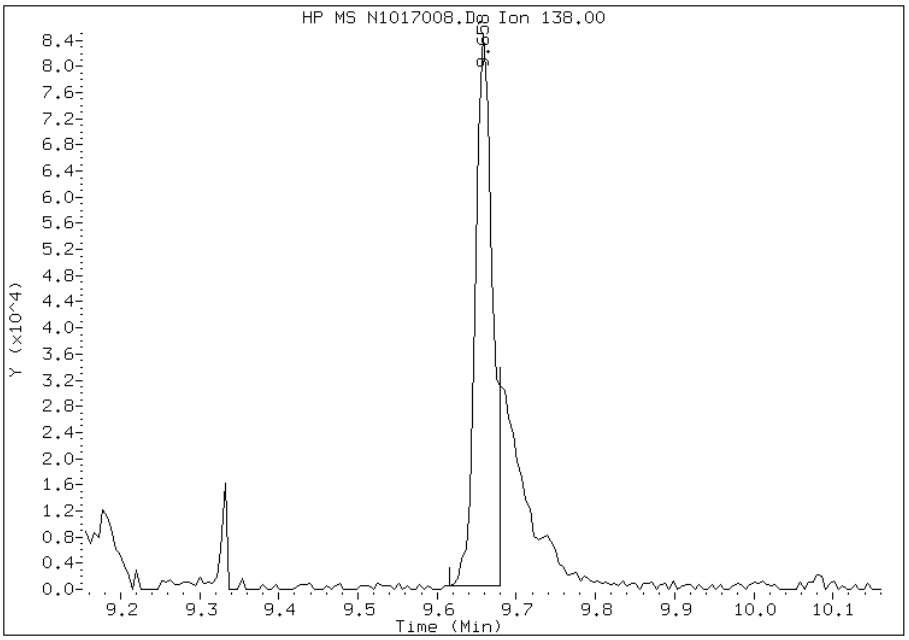
Processing Integration Results

RT: 9.66

Response: 128594

Amount: 17

Conc: 17



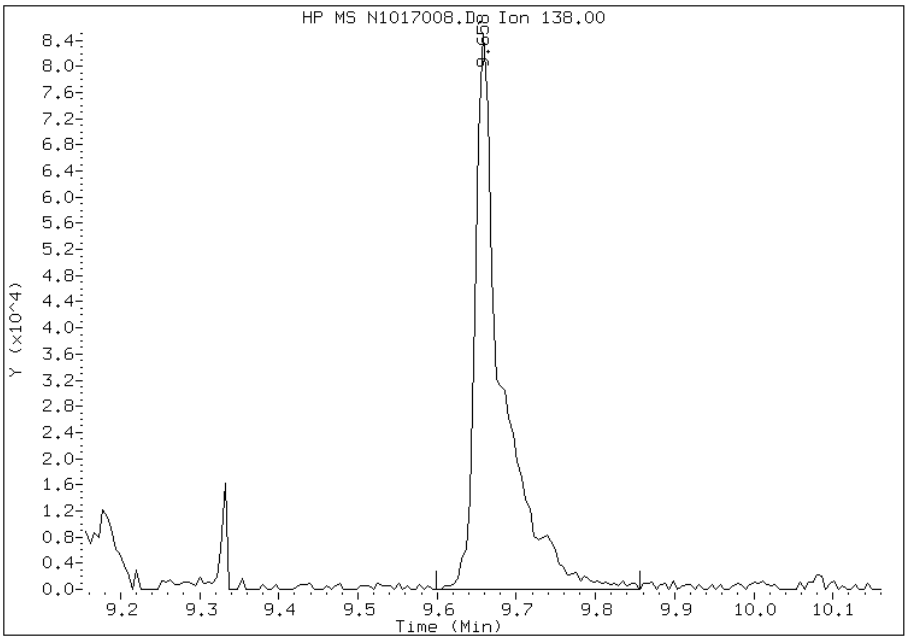
Manual Integration Results

RT: 9.66

Response: 201634

Amount: 26

Conc: 26



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 05:56
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1017008.D
Inj. Date and Time: 17-OCT-2013 15:04
Instrument ID: 733.i
Client ID:
Compound: 99 N-Nitrosodiphenylamine (1)
CAS #: 86-30-6
Report Date: 10/18/2013

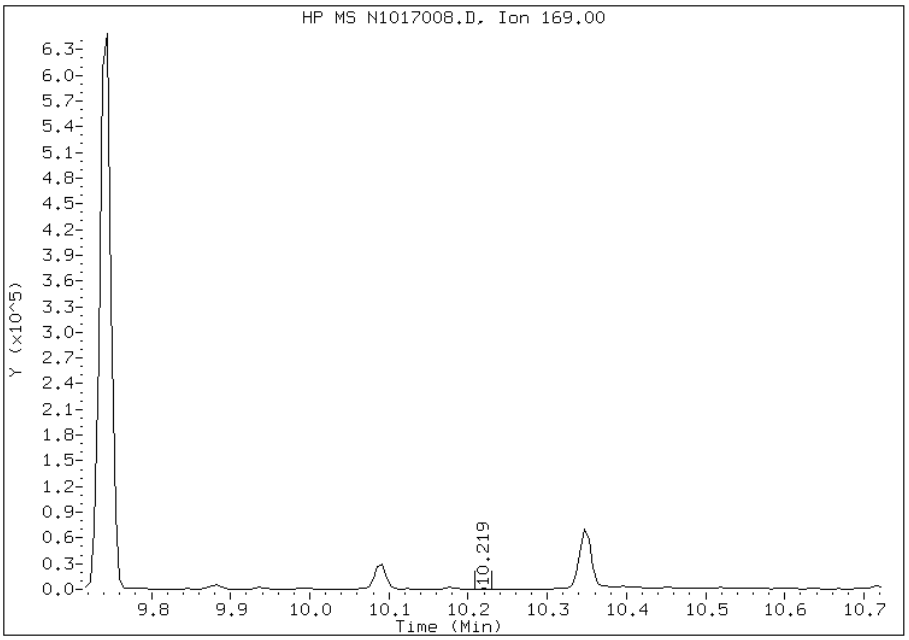
Processing Integration Results

RT: 10.22

Response: 689

Amount: 0

Conc: 0



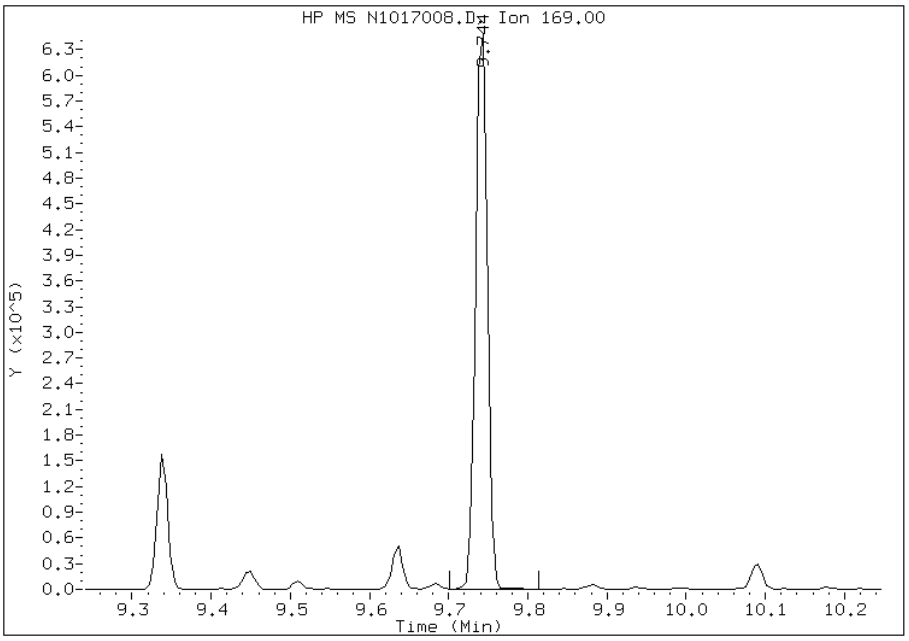
Manual Integration Results

RT: 9.74

Response: 660567

Amount: 25

Conc: 25



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 05:56
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N1017008.D
Inj. Date and Time: 17-OCT-2013 15:04
Instrument ID: 733.i
Client ID:
Compound: 115 Phenanthrene
CAS #: 85-01-8
Report Date: 10/18/2013

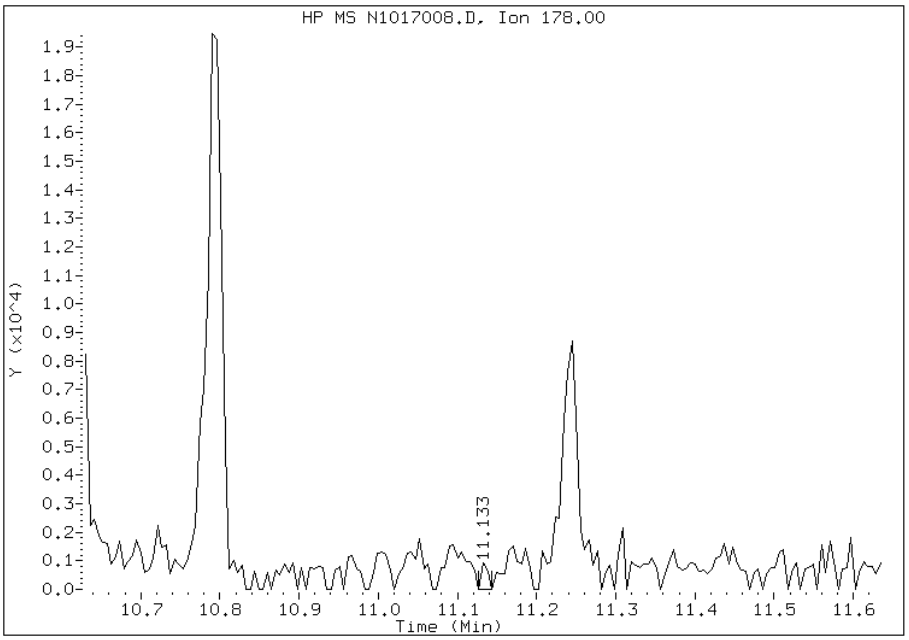
Processing Integration Results

RT: 11.13

Response: 501

Amount: 0

Conc: 0



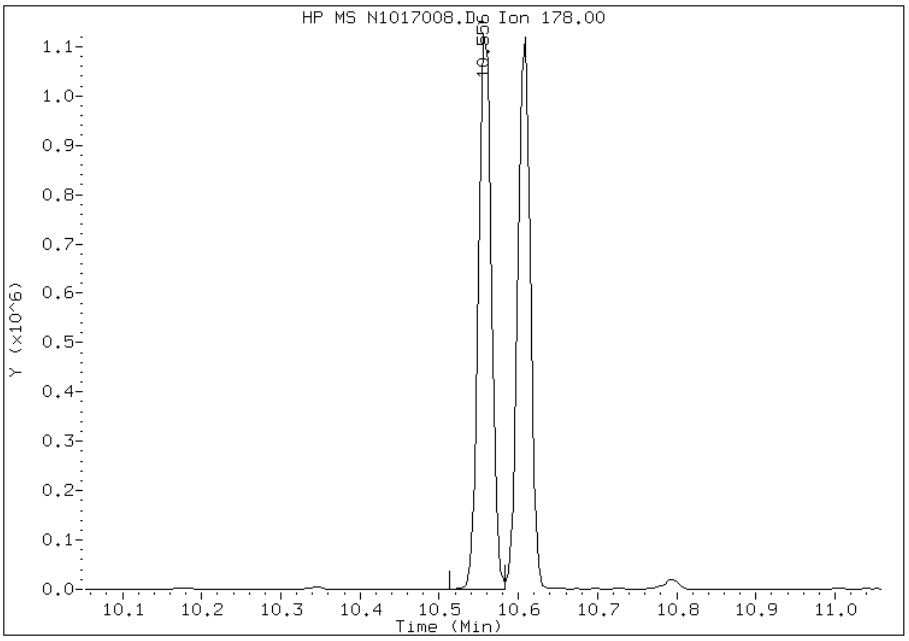
Manual Integration Results

RT: 10.56

Response: 1264631

Amount: 23

Conc: 23



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 05:57
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N1017008.D
Inj. Date and Time: 17-OCT-2013 15:04
Instrument ID: 733.i
Client ID:
Compound: 98 4,6-Dinitro-2-methylphenol
CAS #: 534-52-1
Report Date: 10/18/2013

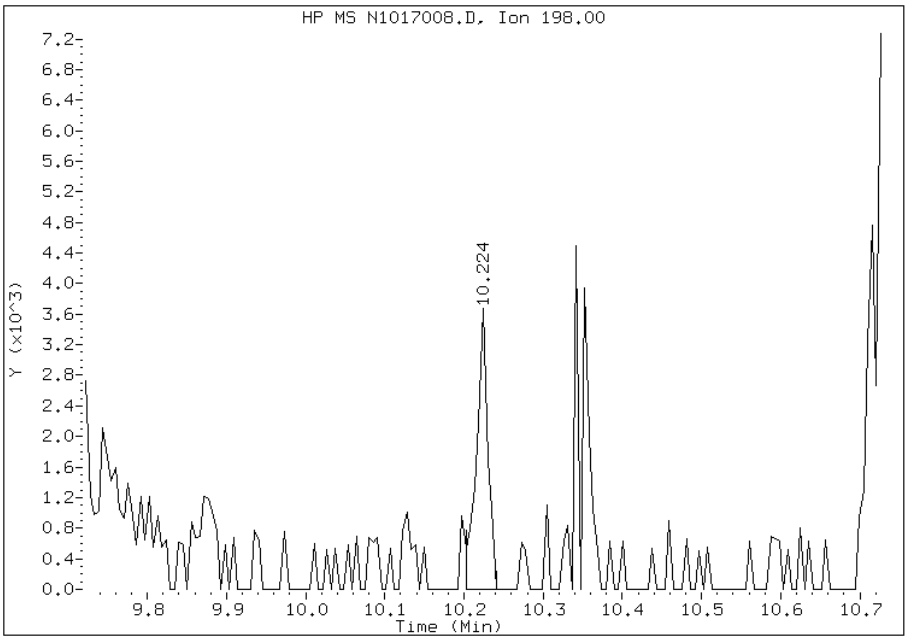
Processing Integration Results

RT: 10.22

Response: 3611

Amount: 2

Conc: 2



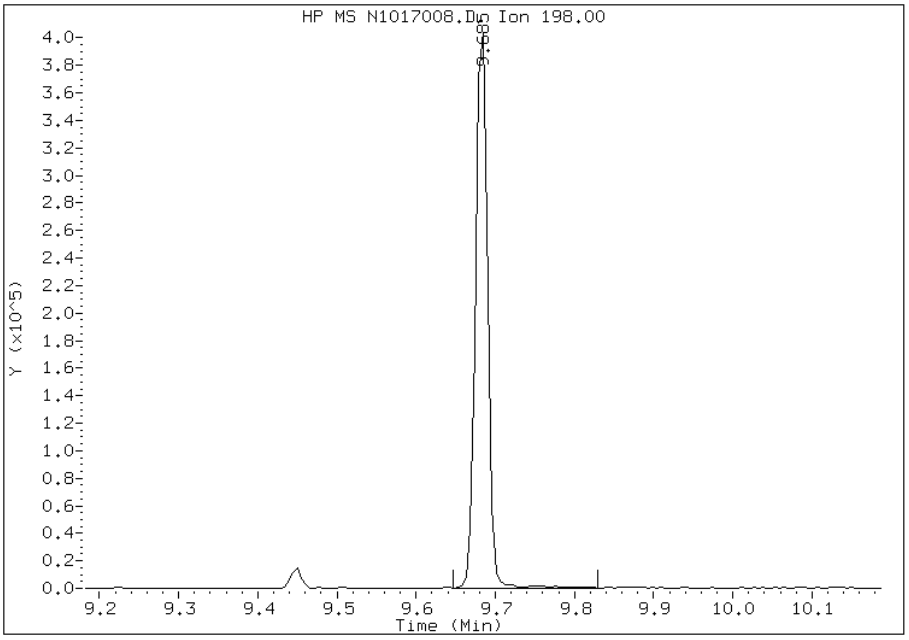
Manual Integration Results

RT: 9.68

Response: 425159

Amount: 58

Conc: 58



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 05:56
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N1017008.D
Inj. Date and Time: 17-OCT-2013 15:04
Instrument ID: 733.i
Client ID:
Compound: 111 Pentachlorophenol
CAS #: 87-86-5
Report Date: 10/18/2013

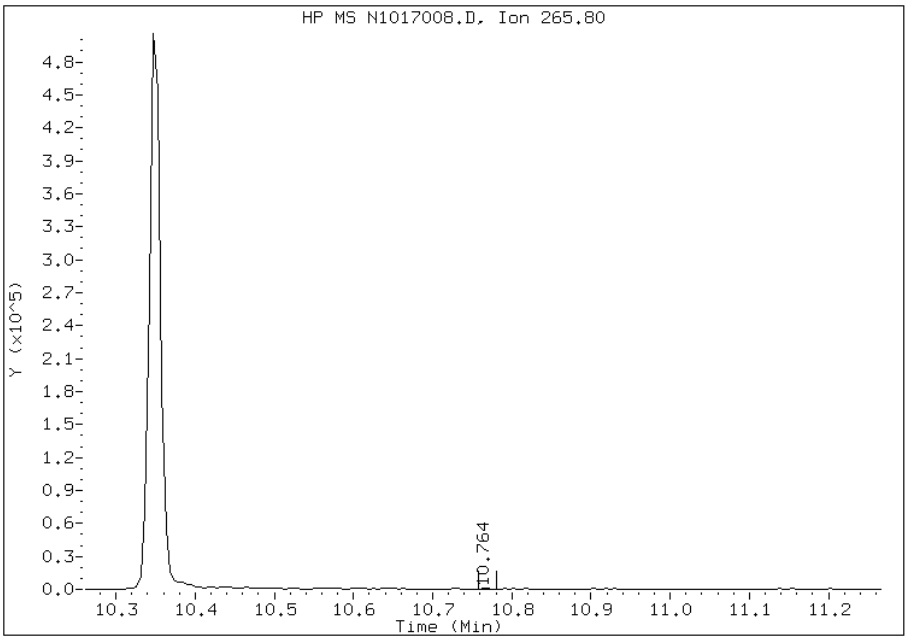
Processing Integration Results

RT: 10.76

Response: 583

Amount: 2

Conc: 2



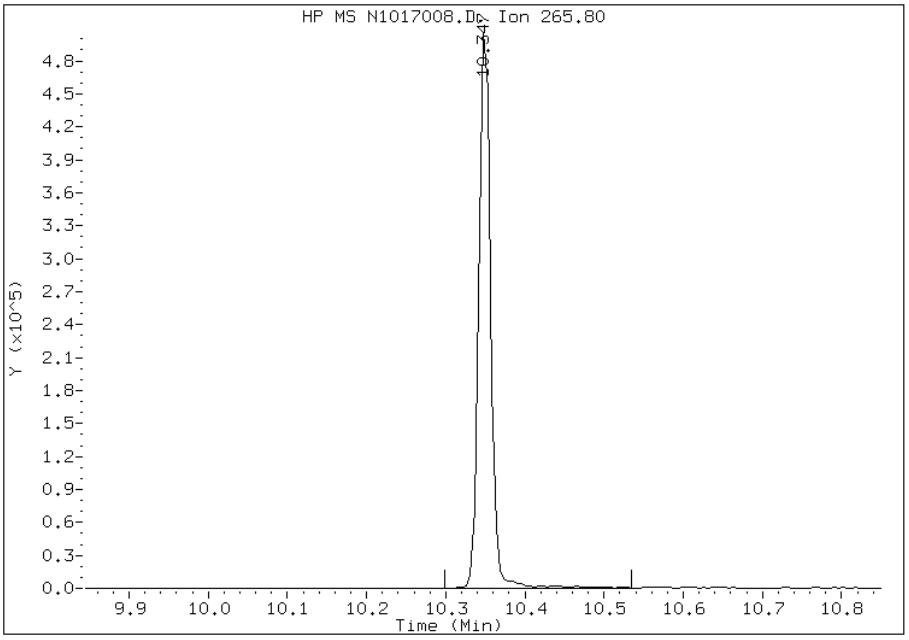
Manual Integration Results

RT: 10.35

Response: 522757

Amount: 62

Conc: 62



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 05:57
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N1017008.D
Inj. Date and Time: 17-OCT-2013 15:04
Instrument ID: 733.i
Client ID:
Compound: 210 Atrazine
CAS #: 1912-24-9
Report Date: 10/18/2013

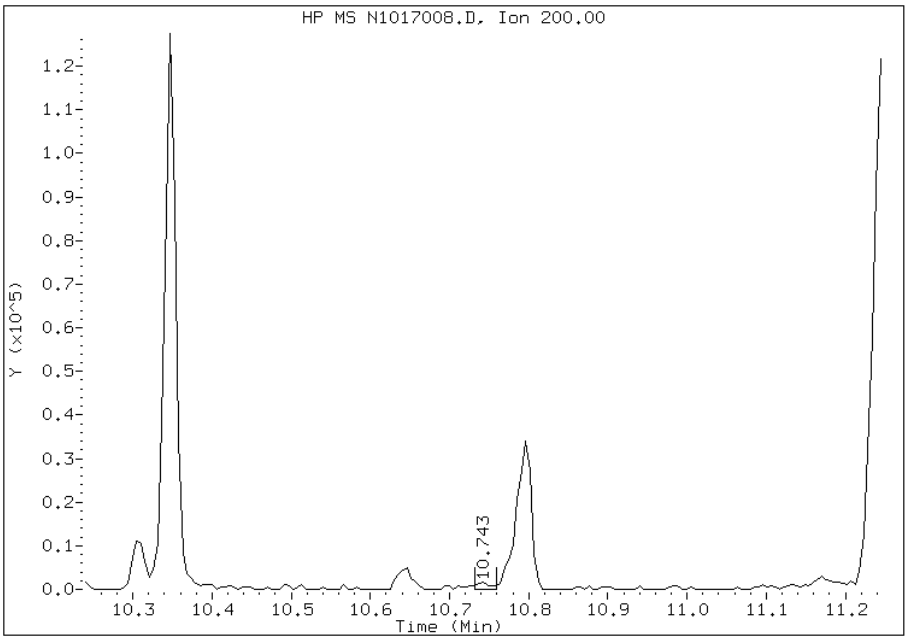
Processing Integration Results

RT: 10.74

Response: 2081

Amount: 0

Conc: 0



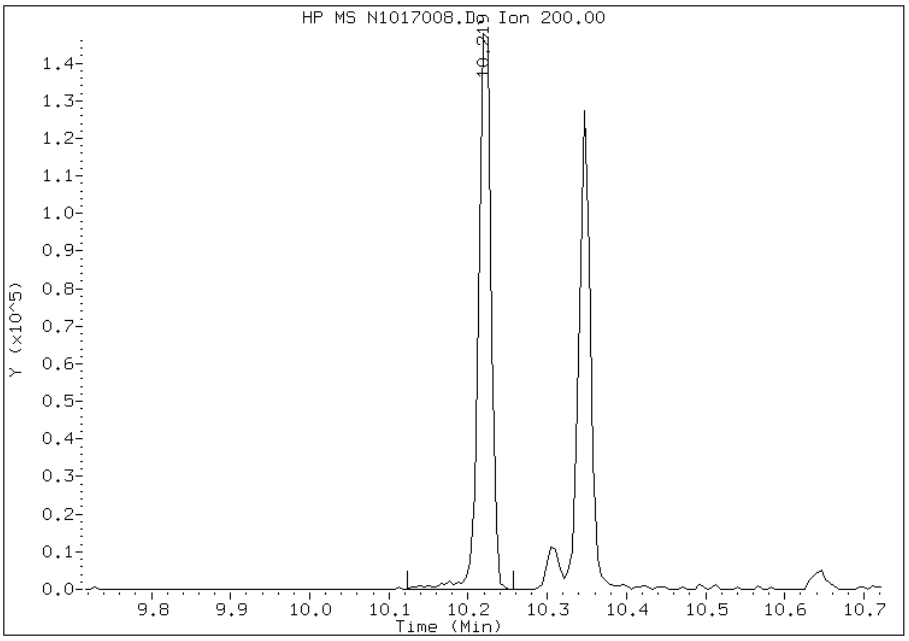
Manual Integration Results

RT: 10.22

Response: 162299

Amount: 16

Conc: 16



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 05:56
Manual Integration Reason: Peak Not Found

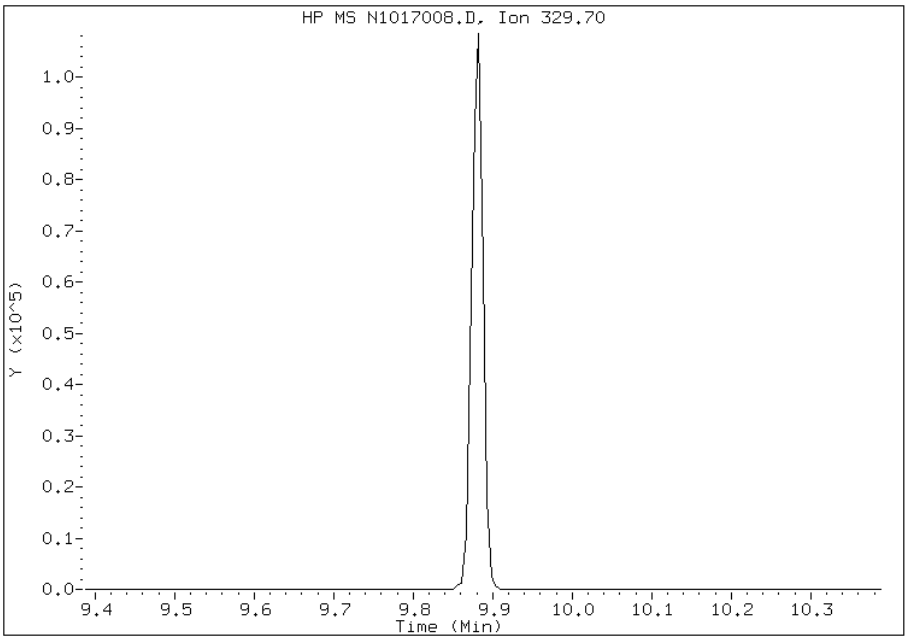
Manual Integration Report

Data File: N1017008.D
Inj. Date and Time: 17-OCT-2013 15:04
Instrument ID: 733.i
Client ID:
Compound: 159 2,4,6-Tribromophenol
CAS #: 118-79-6
Report Date: 10/18/2013

Processing Integration Results

Not Detected

Expected RT: 9.89



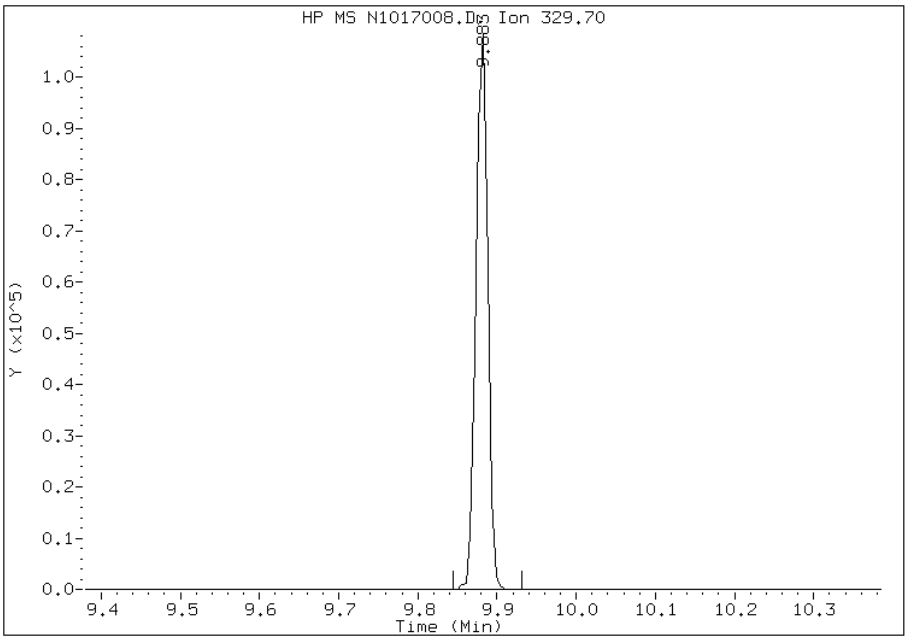
Manual Integration Results

RT: 9.88

Response: 109710

Amount: 26

Conc: 26



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 05:58
Manual Integration Reason: Peak Not Found

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-02-20131009 MSD | Lab Sample ID: 180-26012-1 MSD

Matrix: Water | Lab File ID: N1017009.D

Analysis Method: 8270D | Date Collected: 10/09/2013 11:15

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1050(mL) | Date Analyzed: 10/17/2013 15:31

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	114		1.9	0.14
208-96-8	Acenaphthylene	109		1.9	0.14
120-12-7	Anthracene	109		1.9	0.15
56-55-3	Benzo[a]anthracene	114		1.9	0.14
50-32-8	Benzo[a]pyrene	81.4		1.9	0.13
205-99-2	Benzo[b]fluoranthene	77.3		1.9	0.15
191-24-2	Benzo[g,h,i]perylene	105		1.9	0.14
207-08-9	Benzo[k]fluoranthene	75.9		1.9	0.52
117-81-7	Bis(2-ethylhexyl) phthalate	122		19	12
108-60-1	2,2'-oxybis[1-chloropropane]	81.3		1.9	0.19
101-55-3	4-Bromophenyl phenyl ether	112		9.5	0.60
85-68-7	Butyl benzyl phthalate	112		9.5	1.4
86-74-8	Carbazole	131		1.9	0.15
106-47-8	4-Chloroaniline	78.7		9.5	0.84
91-58-7	2-Chloronaphthalene	99.1		1.9	0.14
7005-72-3	4-Chlorophenyl phenyl ether	113		9.5	0.48
218-01-9	Chrysene	127		1.9	0.13
53-70-3	Dibenz(a,h)anthracene	106		1.9	0.15
132-64-9	Dibenzofuran	114		9.5	0.59
84-74-2	Di-n-butyl phthalate	124		9.5	1.2
91-94-1	3,3'-Dichlorobenzidine	8.17	J	9.5	1.1
84-66-2	Diethyl phthalate	126		9.5	1.4
131-11-3	Dimethyl phthalate	122		9.5	0.73
121-14-2	2,4-Dinitrotoluene	134		9.5	0.51
606-20-2	2,6-Dinitrotoluene	129		9.5	0.76
117-84-0	Di-n-octyl phthalate	80.5		9.5	2.0
206-44-0	Fluoranthene	123		1.9	0.15
86-73-7	Fluorene	117		1.9	0.21
118-74-1	Hexachlorobenzene	117		1.9	0.17
87-68-3	Hexachlorobutadiene	98.1		1.9	0.16
77-47-4	Hexachlorocyclopentadiene	73.6		9.5	0.49
67-72-1	Hexachloroethane	89.0		9.5	0.60
193-39-5	Indeno[1,2,3-cd]pyrene	99.7		1.9	0.19
78-59-1	Isophorone	111		9.5	0.61

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-02-20131009 MSD | Lab Sample ID: 180-26012-1 MSD

Matrix: Water | Lab File ID: N1017009.D

Analysis Method: 8270D | Date Collected: 10/09/2013 11:15

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1050(mL) | Date Analyzed: 10/17/2013 15:31

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
91-57-6	2-Methylnaphthalene	105		1.9	0.12
91-20-3	Naphthalene	105		1.9	0.13
88-74-4	2-Nitroaniline	124		48	3.3
99-09-2	3-Nitroaniline	76.1		48	3.1
100-01-6	4-Nitroaniline	115		48	1.6
100-02-7	4-Nitrophenol	268		48	6.2
98-95-3	Nitrobenzene	107		19	0.80
621-64-7	N-Nitrosodi-n-propylamine	101		1.9	0.29
86-30-6	N-Nitrosodiphenylamine	120		9.5	0.81
85-01-8	Phenanthrene	110		1.9	0.41
129-00-0	Pyrene	101		1.9	0.15
59-50-7	4-Chloro-3-methylphenol	120		9.5	0.72
95-57-8	2-Chlorophenol	99.3		9.5	1.6
95-48-7	2-Methylphenol	103		9.5	0.82
106-44-5	Methylphenol, 3 & 4	99.6		9.5	0.86
120-83-2	2,4-Dichlorophenol	111		1.9	0.32
105-67-9	2,4-Dimethylphenol	257		9.5	0.81
51-28-5	2,4-Dinitrophenol	260		48	5.8
534-52-1	4,6-Dinitro-2-methylphenol	277		48	2.1
88-75-5	2-Nitrophenol	114		9.5	1.6
87-86-5	Pentachlorophenol	286		9.5	0.63
108-95-2	Phenol	86.3		1.9	0.55
95-95-4	2,4,5-Trichlorophenol	121		9.5	1.5
88-06-2	2,4,6-Trichlorophenol	119		9.5	1.7
98-86-2	Acetophenone	94.3		9.5	0.76
1912-24-9	Atrazine	77.3		9.5	0.85
100-52-7	Benzaldehyde	98.7		9.5	1.4
92-52-4	1,1'-Biphenyl	108		9.5	0.40
105-60-2	Caprolactam	138		48	11
111-91-1	Bis(2-chloroethoxy)methane	103		9.5	0.55
111-44-4	Bis(2-chloroethyl)ether	97.5		1.9	0.24

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-02-20131009 MSD Lab Sample ID: 180-26012-1 MSD

Matrix: Water Lab File ID: N1017009.D

Analysis Method: 8270D Date Collected: 10/09/2013 11:15

Extract. Method: 3520C Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1050(mL) Date Analyzed: 10/17/2013 15:31

Con. Extract Vol.: 10.0(mL) Dilution Factor: 1

Injection Volume: 2(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	55		37-104
4165-62-2	Phenol-d5 (Surr)	47		30-102
321-60-8	2-Fluorobiphenyl	48		35-108
118-79-6	2,4,6-Tribromophenol (Surr)	64		33-122
367-12-4	2-Fluorophenol (Surr)	48		26-100
1718-51-0	Terphenyl-d14 (Surr)	30		25-130

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN101713D.b\N1017009.D
Lab Smp Id: 180-26012-B-1-B MSD
Inj Date : 17-OCT-2013 15:31
Operator : 3200 Inst ID: 733.i
Smp Info : 180-26012-B-1-B MSD
Misc Info : TN101713D.b,T8270d.m,padepi.sub
Comment :
Method : \\PITSVR06\D\chem\733.i\TN101713D.b\T8270d.m
Meth Date : 17-Oct-2013 11:57 piccolinov Quant Type: ISTD
Cal Date : 09-OCT-2013 08:22 Cal File: N1009IC8.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: padepi.sub
Target Version: 4.14
Processing Host: PITPC-502

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
* 1	1,4-Dichlorobenzene-d4	152	6.272	6.271	(1.000)	123161	8.00000	
* 2	Naphthalene-d8	136	7.501	7.505	(1.000)	404275	8.00000	
* 3	Acenaphthene-d10	164	9.152	9.156	(1.000)	231245	8.00000	
* 4	Phenanthrene-d10	188	10.535	10.540	(1.000)	396605	8.00000	(M)
* 5	Chrysene-d12	240	14.088	14.113	(1.000)	501724	8.00000	
* 6	Perylene-d12	264	17.037	17.062	(1.000)	670988	8.00000	(M)
198	1,4-Dioxane	88	1.731	1.693	(0.276)	129567	16.1680	16.168
10	N-Nitrosodimethylamine	74	2.389	2.318	(0.381)	188366	18.8938	18.894
9	Pyridine	79	2.495	2.387	(0.398)	18423	1.01398	1.0140(M)
16	Methyl methanesulfonate	80	Compound Not Detected.					
206	Benzaldehyde	77	5.824	5.817	(0.928)	310402	20.7193	20.719
21	Aniline	93	5.941	5.935	(0.947)	223117	8.27342	8.2734
22	Phenol	94	5.936	5.924	(0.946)	464037	18.1275	18.127
23	bis(2-Chloroethyl)ether	93	6.005	6.004	(0.957)	332804	20.4717	20.472
24	2-Chlorophenol	128	6.069	6.063	(0.968)	420600	20.8542	20.854
26	1,3-Dichlorobenzene	146	6.219	6.218	(0.991)	465971	19.2372	19.237
27	1,4-Dichlorobenzene	146	6.288	6.293	(1.003)	477044	19.2393	19.239
28	1,2-Dichlorobenzene	146	6.443	6.442	(1.027)	443537	19.1327	19.133
217	Indene	116	6.529	6.528	(1.041)	665039	19.4788	19.479
29	Benzyl Alcohol	108	6.411	6.405	(1.022)	236807	21.1200	21.120
30	2-Methylphenol	108	6.523	6.522	(1.040)	366583	21.6485	21.648
31	2,2'-oxybis(1-Chloropropane)	45	6.539	6.538	(1.043)	303290	17.0807	17.081(M)
37	Acetophenone	105	6.662	6.661	(1.062)	547522	19.7985	19.798
32	N-Nitroso-di-n-propylamine	70	6.662	6.661	(1.062)	262393	21.2548	21.255
192	4-Methylphenol	108	6.668	6.667	(1.063)	371105	20.9073	20.907
34	Hexachloroethane	117	6.774	6.779	(1.080)	173642	18.6932	18.693
35	Nitrobenzene	77	6.828	6.827	(0.910)	409851	22.5079	22.508
36	N-Nitrosopyrrolidine	100	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ng)
41 Isophorone	82	7.058	7.051	(0.941)	683125	23.3747	23.375
42 2-Nitrophenol	139	7.138	7.137	(0.952)	237743	24.0042	24.004
43 2,4-Dimethylphenol	107	7.170	7.169	(0.956)	861119	53.9285	53.928
44 bis(2-Chloroethoxy)methane	93	7.250	7.254	(0.967)	393439	21.6632	21.663
48 2,4-Dichlorophenol	162	7.367	7.366	(0.982)	383508	23.2814	23.281
49 Benzoic Acid	122	7.245	7.238	(0.966)	148518	20.7294	20.729(M)
50 1,2,4-Trichlorobenzene	180	7.448	7.452	(0.993)	452627	22.4982	22.498
51 Naphthalene	128	7.522	7.527	(1.003)	1181647	22.0331	22.033
52 4-Chloroaniline	127	7.565	7.564	(1.009)	355916	16.5316	16.532
54 2,6-Dichlorophenol	162	Compound Not Detected.					
56 Hexachlorobutadiene	225	7.640	7.649	(1.019)	279206	20.5995	20.600
208 Caprolactam	113	7.891	7.863	(1.052)	111708	28.9692	28.969(M)
59 4-Chloro-3-Methylphenol	107	8.014	8.013	(1.068)	366603	25.2010	25.201
62 2-Methylnaphthalene	142	8.174	8.178	(1.090)	821648	21.9846	21.985
63 1-Methylnaphthalene	142	8.270	8.274	(1.103)	753363	22.0352	22.035
64 Hexachlorocyclopentadiene	237	8.324	8.333	(0.910)	231919	15.4460	15.446
65 1,2,4,5-Tetrachlorobenzene	216	8.334	8.339	(0.911)	493533	22.5166	22.516
66 2,4,6-Trichlorophenol	196	8.431	8.435	(0.921)	304711	25.0936	25.094
67 2,4,5-Trichlorophenol	196	8.468	8.472	(0.925)	325009	25.4630	25.463
209 1,1'-Biphenyl	154	8.601	8.606	(0.940)	1012005	22.6665	22.666
70 2-Chloronaphthalene	162	8.628	8.638	(0.943)	793981	20.8144	20.814
73 2-Nitroaniline	65	8.714	8.718	(0.952)	218522	26.1415	26.141
76 Dimethylphthalate	163	8.863	8.867	(0.968)	953330	25.6546	25.654
78 2,6-Dinitrotoluene	165	8.927	8.932	(0.975)	222847	27.0246	27.025
79 Acenaphthylene	152	9.023	9.028	(0.986)	1226794	22.9226	22.922
81 3-Nitroaniline	138	9.088	9.092	(0.993)	131524	15.9848	15.985
82 Acenaphthene	153	9.184	9.188	(1.004)	836160	23.8645	23.864
83 2,4-Dinitrophenol	184	9.184	9.188	(1.004)	313400	54.6649	54.665
85 4-Nitrophenol	109	9.232	9.225	(1.009)	254341	56.1936	56.194
86 Dibenzofuran	168	9.339	9.343	(1.020)	1150949	24.0331	24.033
87 2,4-Dinitrotoluene	165	9.301	9.306	(1.016)	298303	28.0547	28.055
91 2,3,5,6-Tetrachlorophenol	231	Compound Not Detected.					
88 2,3,4,6-Tetrachlorophenol	232	9.451	9.455	(1.033)	297538	26.9559	26.956
92 2-Naphthylamine	143	Compound Not Detected.					
93 Diethylphthalate	149	9.510	9.509	(1.039)	926582	26.5133	26.513
94 Fluorene	166	9.659	9.663	(1.055)	944044	24.5171	24.517
95 4-Chlorophenyl-phenylether	204	9.638	9.642	(1.053)	511667	23.8152	23.815
96 4-Nitroaniline	138	9.659	9.658	(1.055)	191657	24.1744	24.174
98 4,6-Dinitro-2-methylphenol	198	9.686	9.685	(0.919)	431552	58.0893	58.089(M)
99 N-Nitrosodiphenylamine (1)	169	9.739	9.749	(0.924)	677330	25.1438	25.144(M)
100 1,2-Diphenylhydrazine	77	9.782	9.792	(0.928)	779726	22.5452	22.545(M)
106 4-Bromophenyl-phenylether	248	10.092	10.096	(0.958)	306588	23.4489	23.449(M)
107 Hexachlorobenzene	284	10.177	10.187	(0.966)	302217	24.6574	24.657(M)
210 Atrazine	200	10.225	10.214	(0.971)	167716	16.2395	16.240(M)
111 Pentachlorophenol	266	10.348	10.358	(0.982)	507709	60.0553	60.055(M)
115 Phenanthrene	178	10.557	10.566	(1.002)	1279286	23.0301	23.030(M)
116 Anthracene	178	10.610	10.614	(1.007)	1264985	22.9794	22.979(M)
119 Carbazole	167	10.760	10.759	(1.021)	1306412	27.4192	27.419(M)
120 Di-n-Butylphthalate	149	11.048	11.052	(1.049)	1409088	25.9487	25.949(M)
123 Fluoranthene	202	11.871	11.875	(1.127)	1596778	25.8837	25.884(M)
124 Benzidine	184	Compound Not Detected.					
125 Pyrene	202	12.170	12.180	(0.864)	1690639	21.2334	21.233
131 Butylbenzylphthalate	149	13.019	13.040	(0.924)	638318	23.4692	23.469
135 3,3'-Dichlorobenzidine	252	14.002	14.012	(0.994)	41187	1.71598	1.7160(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ng)
136 Benzo(a)Anthracene	228	14.072	14.097	(0.999)	1731392	23.9722	23.972
137 Chrysene	228	14.141	14.167	(1.004)	1721980	26.6329	26.633
139 bis(2-ethylhexyl)Phthalate	149	14.024	14.049	(0.995)	925984	25.6285	25.628
140 Di-n-octylphthalate	149	15.333	15.364	(0.900)	1708595	16.9012	16.901
141 Benzo(b)fluoranthene	252	16.241	16.261	(0.953)	1895047	16.2271	16.227
142 Benzo(k)fluoranthene	252	16.294	16.314	(0.956)	1855875	15.9359	15.936
143 7,12-dimethylbenz[a]anthracen	256	Compound Not Detected.					
146 Benzo(a)pyrene	252	16.924	16.945	(0.993)	1757412	17.0839	17.084
149 Indeno(1,2,3-cd)pyrene	276	19.296	19.306	(1.133)	2217211	20.9341	20.934
150 Dibenz(a,h)anthracene	278	19.318	19.333	(1.134)	1984744	22.2384	22.238
151 Benzo(g,h,i)perylene	276	19.900	19.910	(1.168)	1941171	22.0621	22.062
$ 154 Nitrobenzene-d5	82	6.812	6.811	(0.908)	396905	21.9240	21.924
$ 155 2-Fluorobiphenyl	172	8.505	8.510	(0.929)	818072	19.0778	19.078
$ 156 Terphenyl-d14	244	12.320	12.340	(0.874)	708074	11.9268	11.927
$ 157 Phenol-d5	99	5.920	5.913	(0.944)	424346	18.8454	18.845
$ 158 2-Fluorophenol	112	4.905	4.888	(0.782)	371443	19.3815	19.381
$ 159 2,4,6-Tribromophenol	330	9.884	9.888	(0.938)	111281	25.5329	25.533(M)

QC Flag Legend

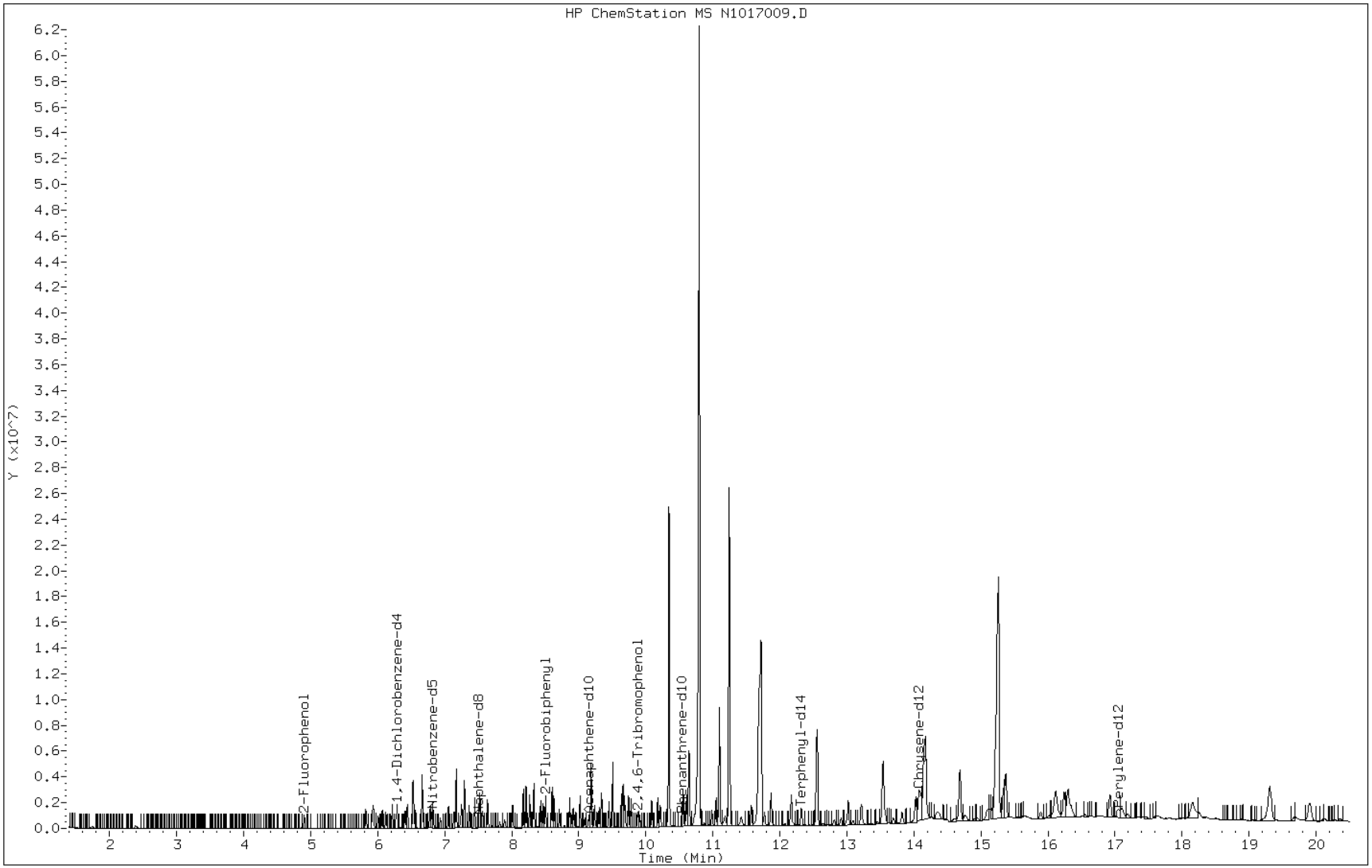
M - Compound response manually integrated.

Data File: N1017009.D

Date: 17-OCT-2013 15:31

Client ID: Instrument: 733.i

Sample Info: 180-26012-B-1-B MSD Operator: 3200



Manual Integration Report

Data File: N1017009.D
Inj. Date and Time: 17-OCT-2013 15:31
Instrument ID: 733.i
Client ID:
Compound: 116 Anthracene
CAS #: 120-12-7
Report Date: 10/18/2013

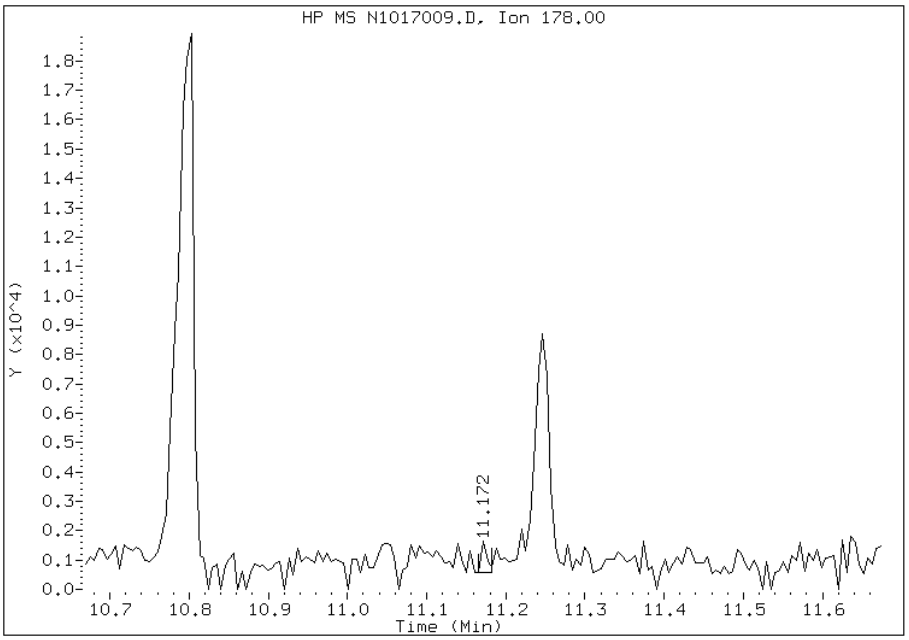
Processing Integration Results

RT: 11.17

Response: 514

Amount: 0

Conc: 0



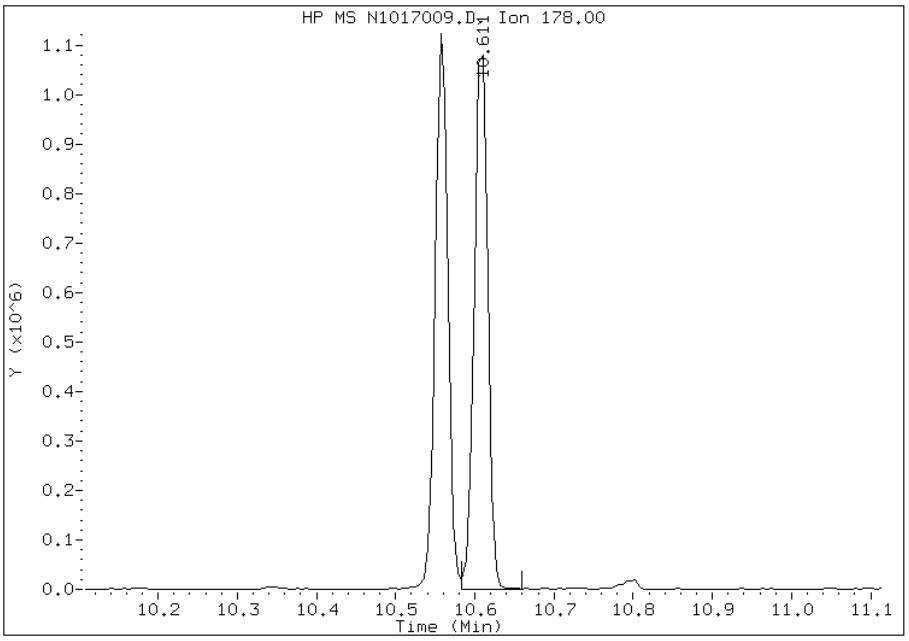
Manual Integration Results

RT: 10.61

Response: 1264985

Amount: 23

Conc: 23



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 06:01
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N1017009.D
Inj. Date and Time: 17-OCT-2013 15:31
Instrument ID: 733.i
Client ID:
Compound: 31 2,2'-oxybis(1-Chloropropane)
CAS #: 108-60-1
Report Date: 10/18/2013

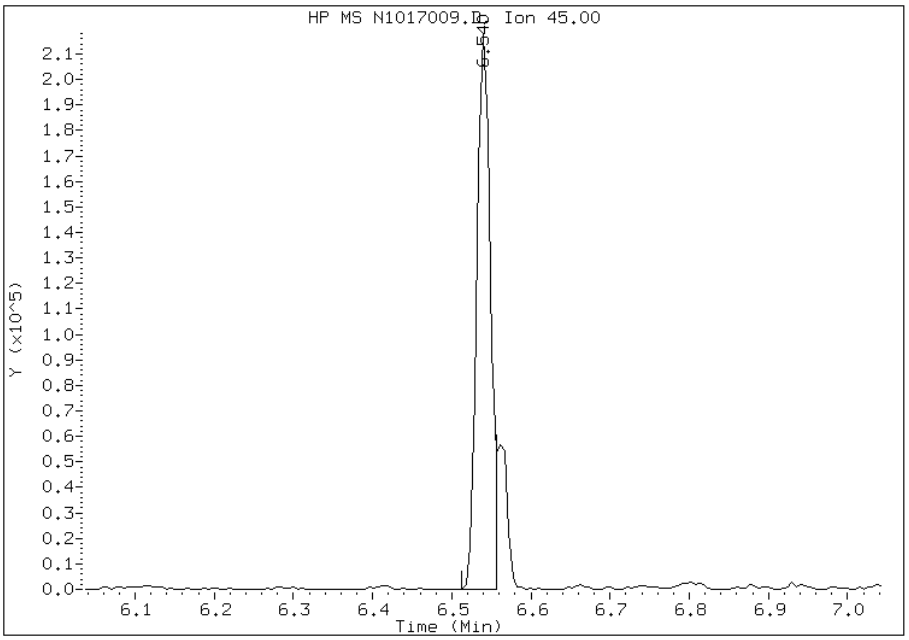
Processing Integration Results

RT: 6.54

Response: 258471

Amount: 15

Conc: 15



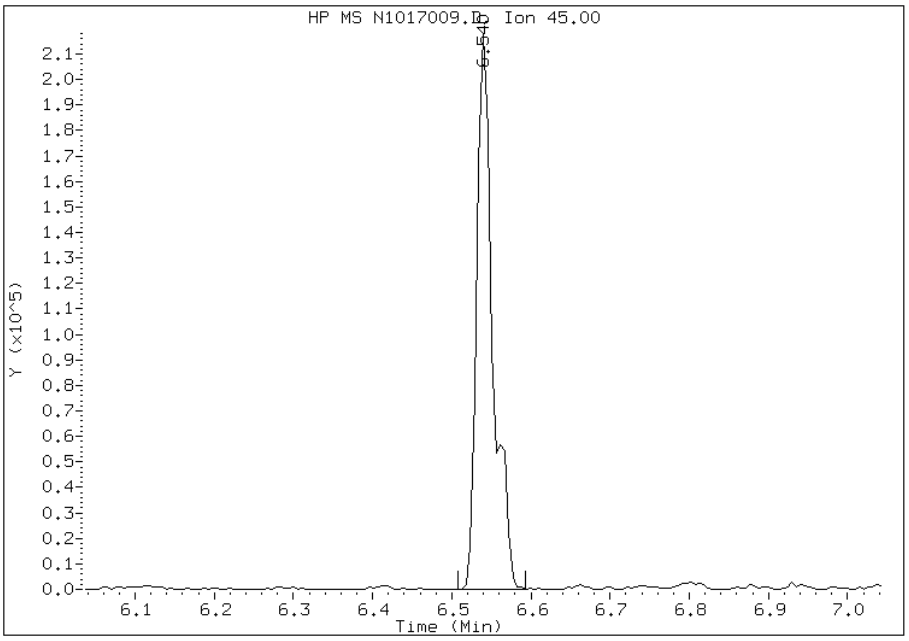
Manual Integration Results

RT: 6.54

Response: 303290

Amount: 17

Conc: 17



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 05:59
Manual Integration Reason: Poor Chromatography

Manual Integration Report

Data File: N1017009.D
Inj. Date and Time: 17-OCT-2013 15:31
Instrument ID: 733.i
Client ID:
Compound: 106 4-Bromophenyl-phenylether
CAS #: 101-55-3
Report Date: 10/18/2013

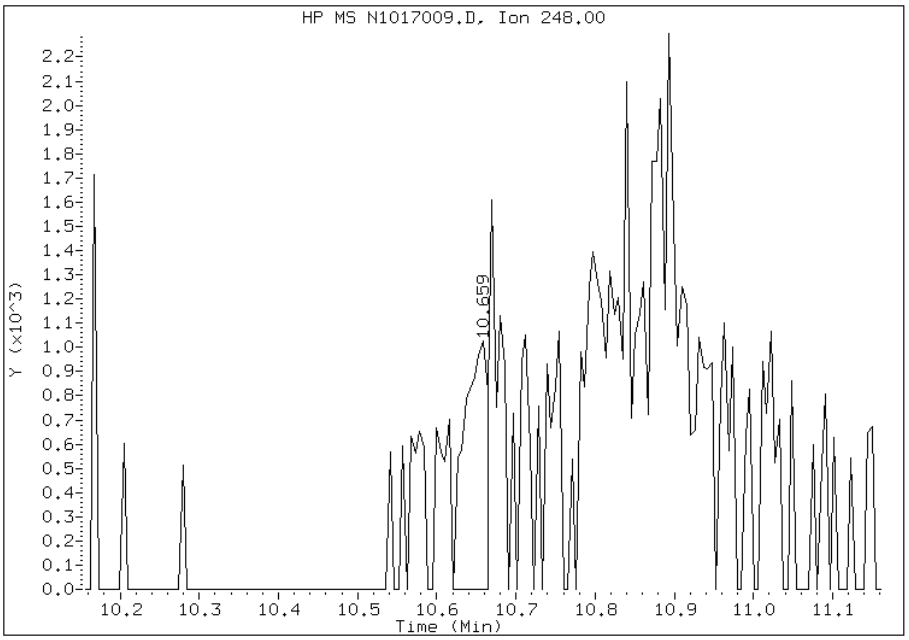
Processing Integration Results

RT: 10.66

Response: 2058

Amount: 0

Conc: 0



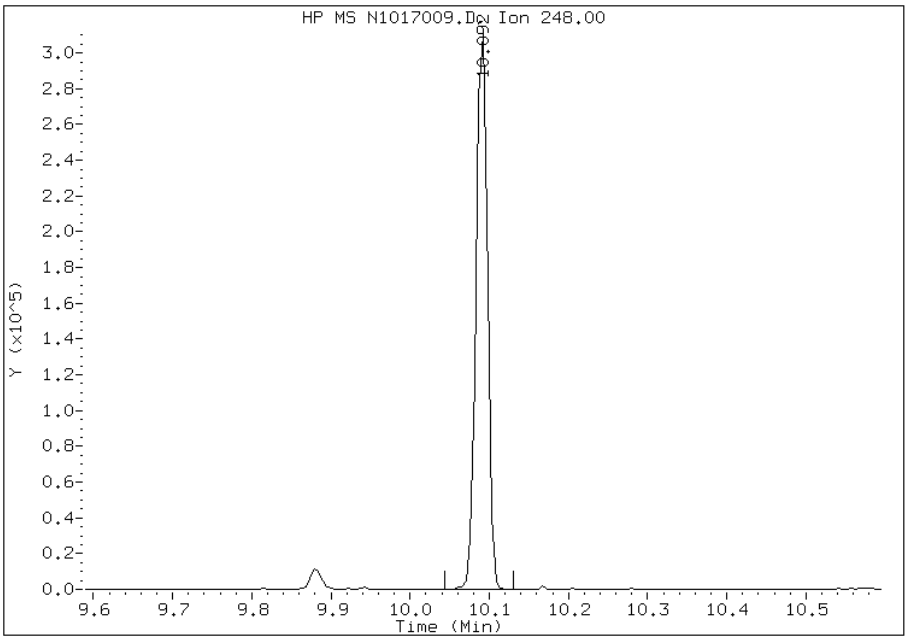
Manual Integration Results

RT: 10.09

Response: 306588

Amount: 23

Conc: 23



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 06:00
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N1017009.D
Inj. Date and Time: 17-OCT-2013 15:31
Instrument ID: 733.i
Client ID:
Compound: 119 Carbazole
CAS #: 86-74-8
Report Date: 10/18/2013

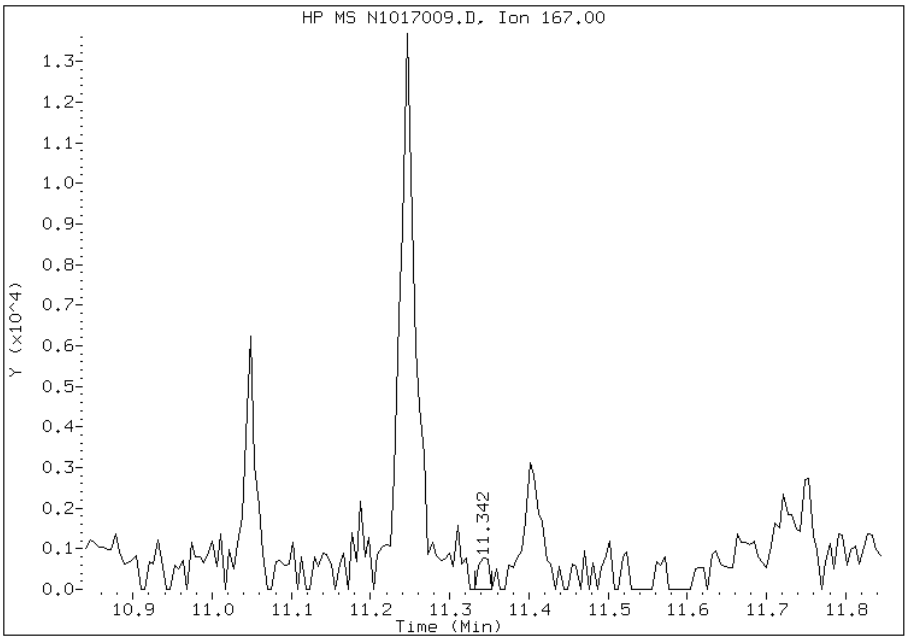
Processing Integration Results

RT: 11.34

Response: 665

Amount: 0

Conc: 0



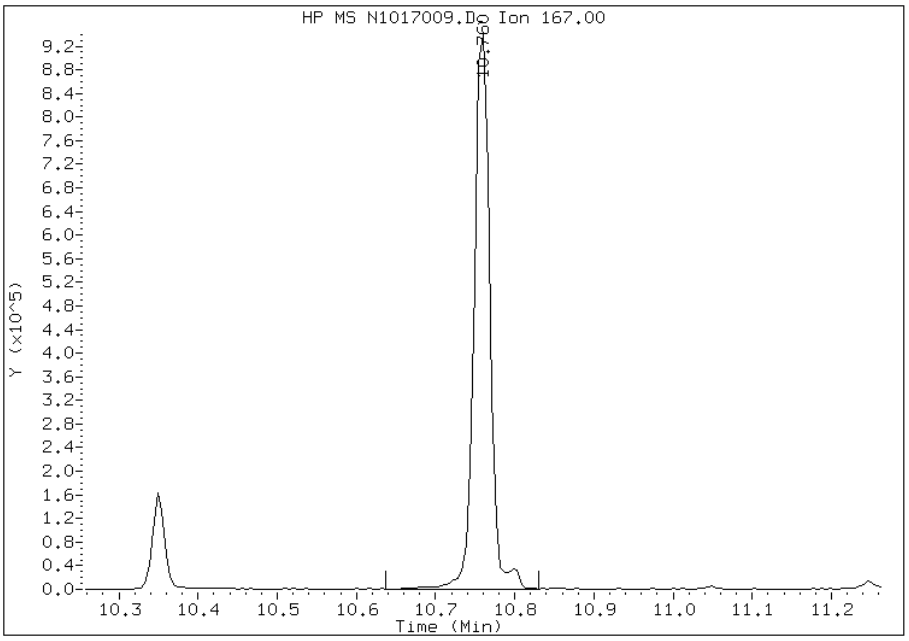
Manual Integration Results

RT: 10.76

Response: 1306412

Amount: 27

Conc: 27



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 06:01
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N1017009.D
Inj. Date and Time: 17-OCT-2013 15:31
Instrument ID: 733.i
Client ID:
Compound: 120 Di-n-Butylphthalate
CAS #: 84-74-2
Report Date: 10/18/2013

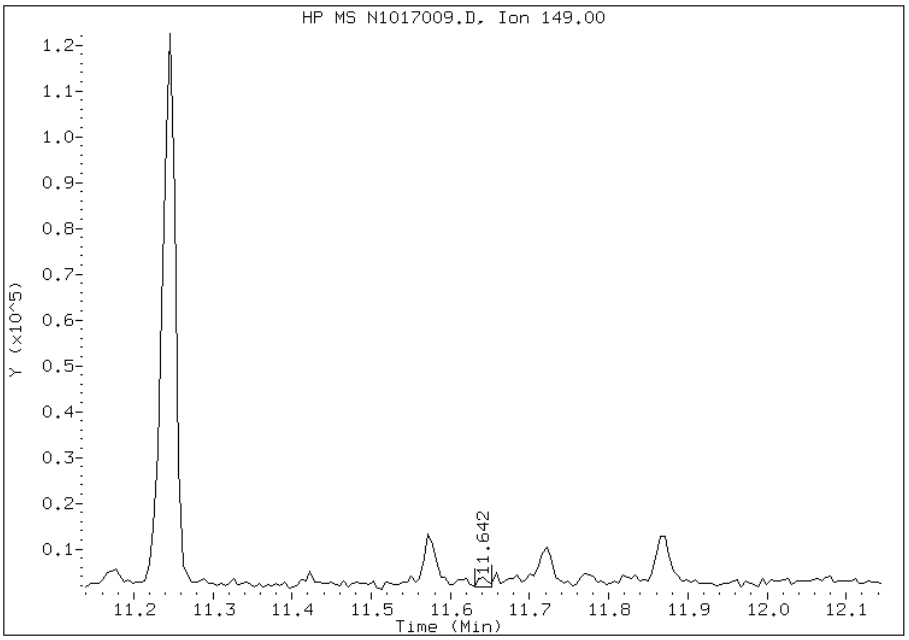
Processing Integration Results

RT: 11.64

Response: 1875

Amount: 0

Conc: 0



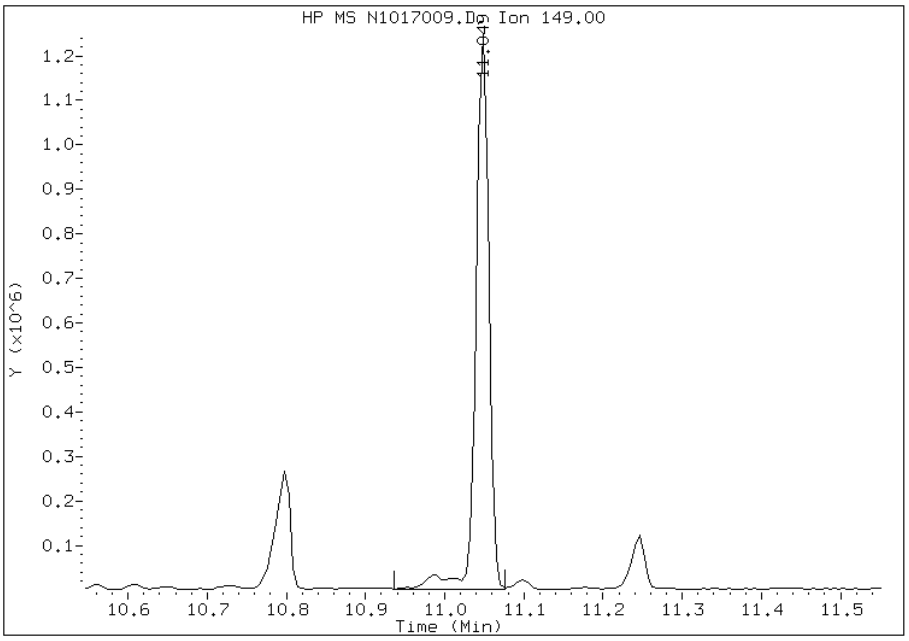
Manual Integration Results

RT: 11.05

Response: 1409088

Amount: 26

Conc: 26



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 06:02
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N1017009.D
Inj. Date and Time: 17-OCT-2013 15:31
Instrument ID: 733.i
Client ID:
Compound: 135 3,3'-Dichlorobenzidine
CAS #: 91-94-1
Report Date: 10/18/2013

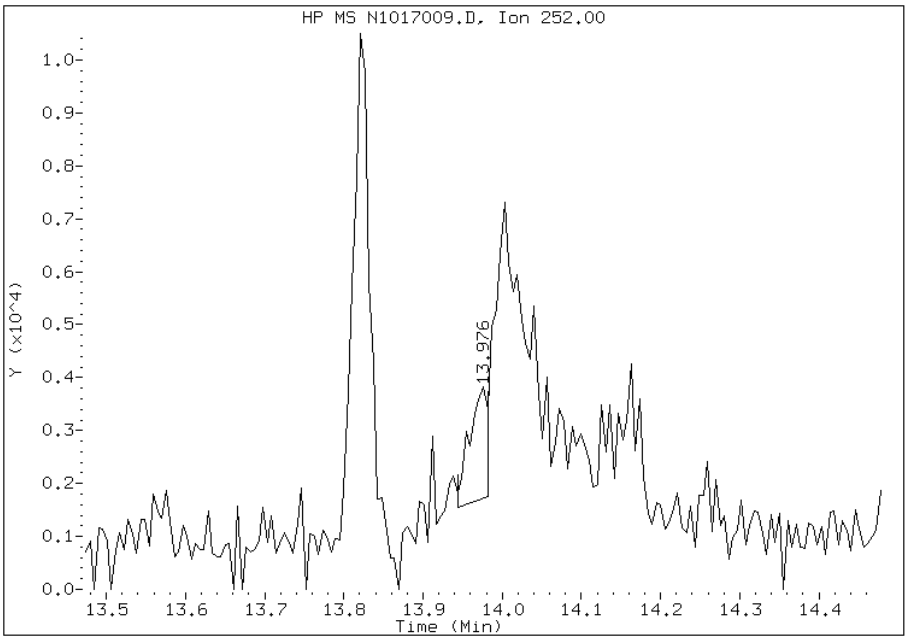
Processing Integration Results

RT: 13.98

Response: 3388

Amount: 0

Conc: 0



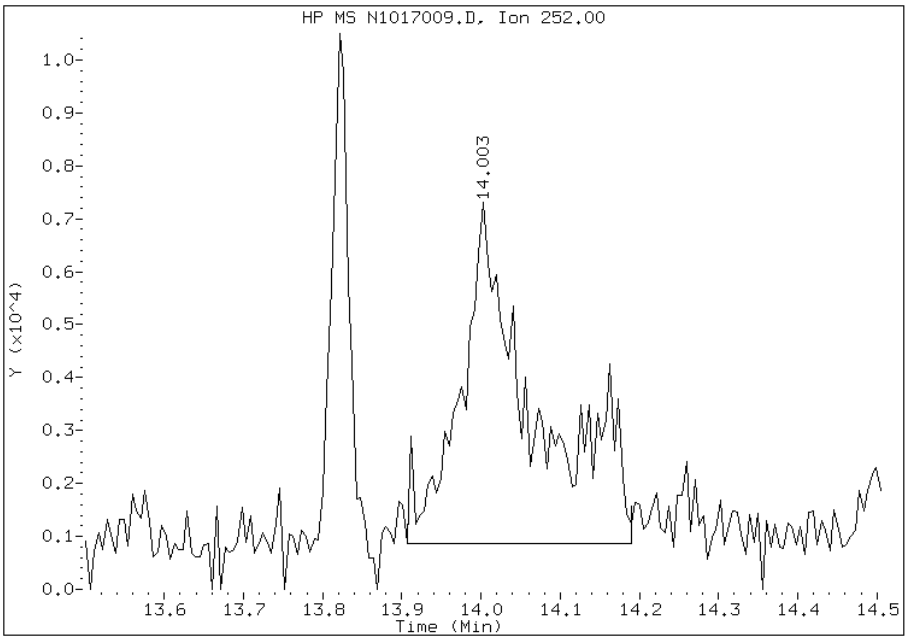
Manual Integration Results

RT: 14.00

Response: 41187

Amount: 2

Conc: 2



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 06:02
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N1017009.D
Inj. Date and Time: 17-OCT-2013 15:31
Instrument ID: 733.i
Client ID:
Compound: 123 Fluoranthene
CAS #: 206-44-0
Report Date: 10/18/2013

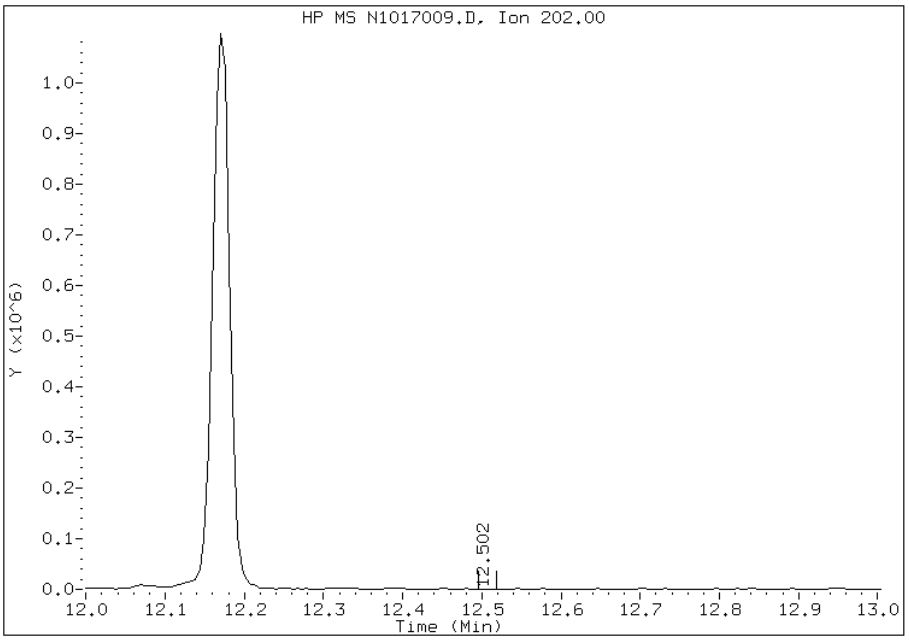
Processing Integration Results

RT: 12.50

Response: 1142

Amount: 0

Conc: 0



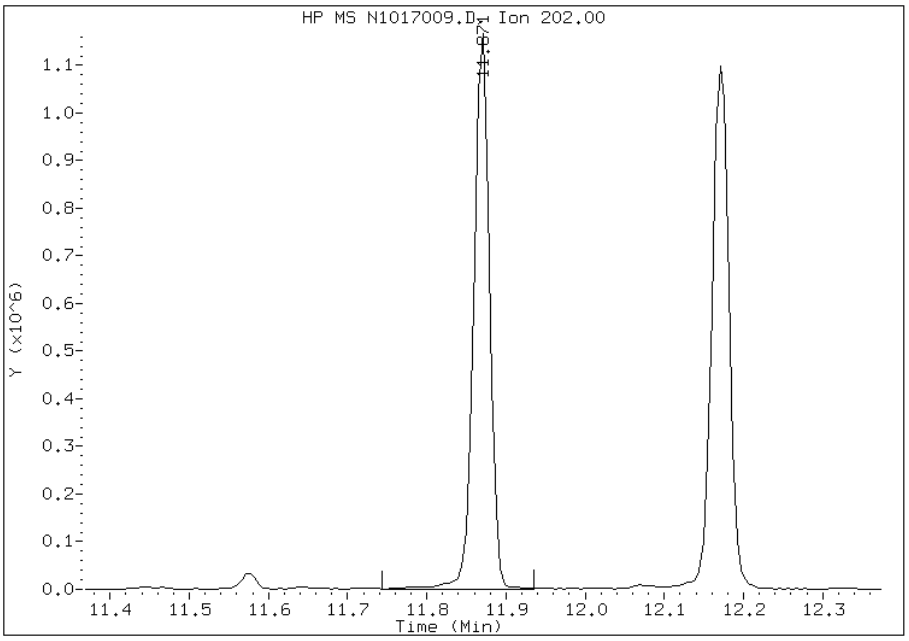
Manual Integration Results

RT: 11.87

Response: 1596778

Amount: 26

Conc: 26



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 06:02
Manual Integration Reason: Peak Not Found

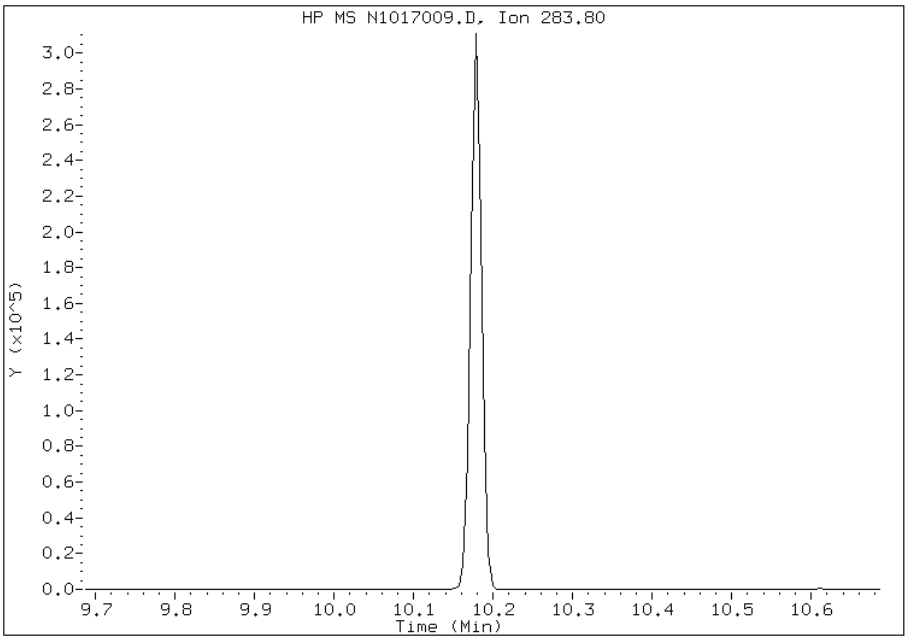
Manual Integration Report

Data File: N1017009.D
Inj. Date and Time: 17-OCT-2013 15:31
Instrument ID: 733.i
Client ID:
Compound: 107 Hexachlorobenzene
CAS #: 118-74-1
Report Date: 10/18/2013

Processing Integration Results

Not Detected

Expected RT: 10.19



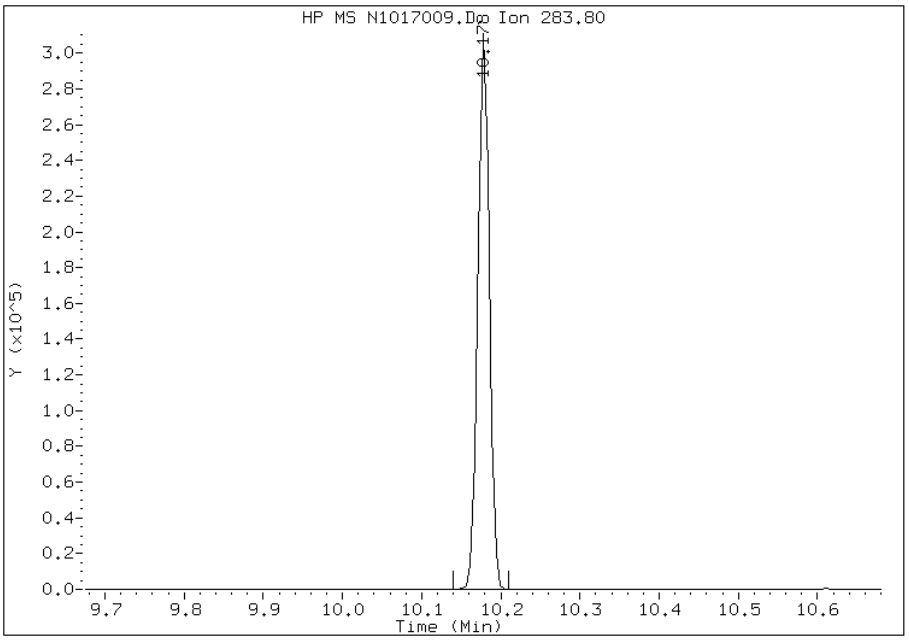
Manual Integration Results

RT: 10.18

Response: 302217

Amount: 25

Conc: 25



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 06:00
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N1017009.D
Inj. Date and Time: 17-OCT-2013 15:31
Instrument ID: 733.i
Client ID:
Compound: 99 N-Nitrosodiphenylamine (1)
CAS #: 86-30-6
Report Date: 10/18/2013

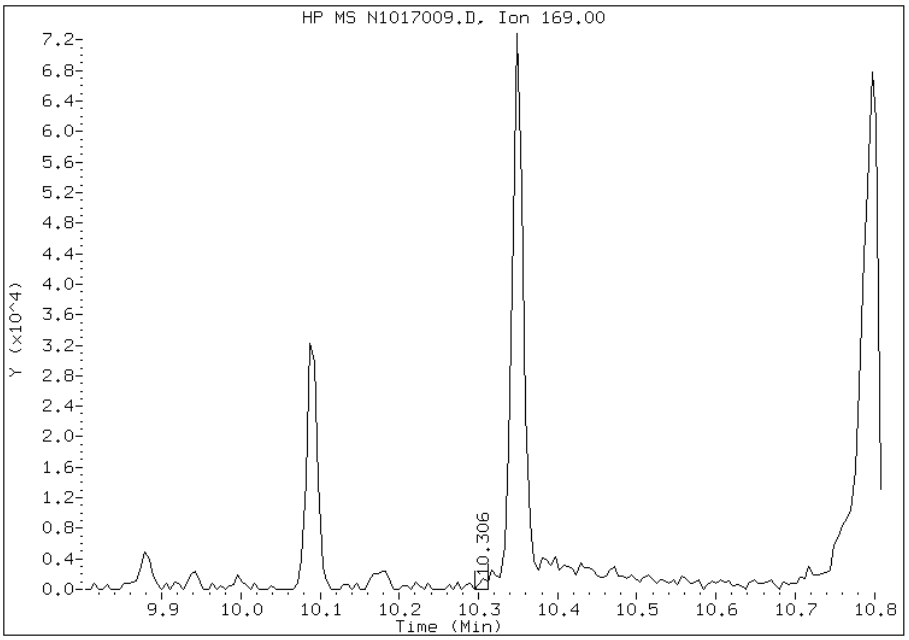
Processing Integration Results

RT: 10.31

Response: 904

Amount: 0

Conc: 0



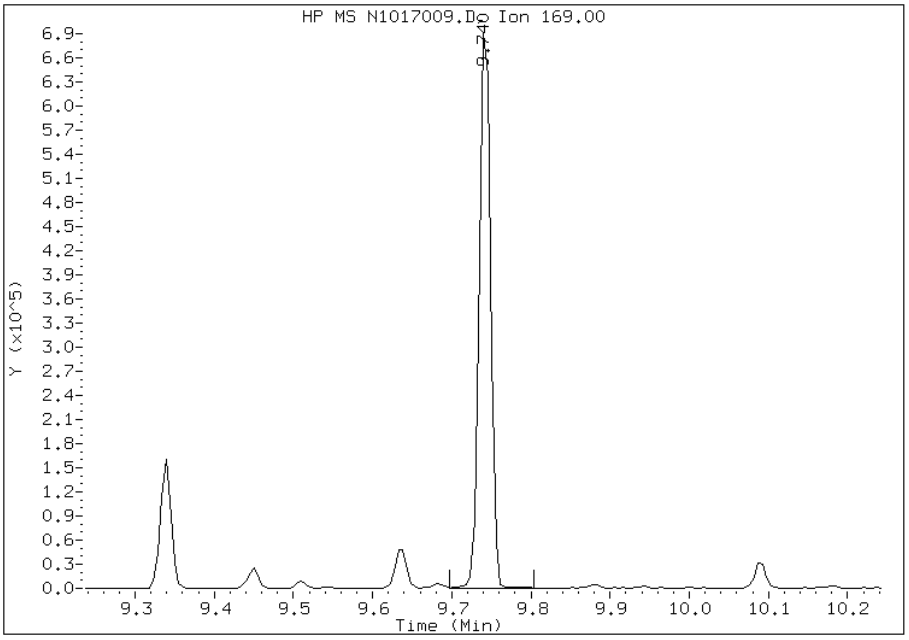
Manual Integration Results

RT: 9.74

Response: 677330

Amount: 25

Conc: 25



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 06:00
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N1017009.D
Inj. Date and Time: 17-OCT-2013 15:31
Instrument ID: 733.i
Client ID:
Compound: 115 Phenanthrene
CAS #: 85-01-8
Report Date: 10/18/2013

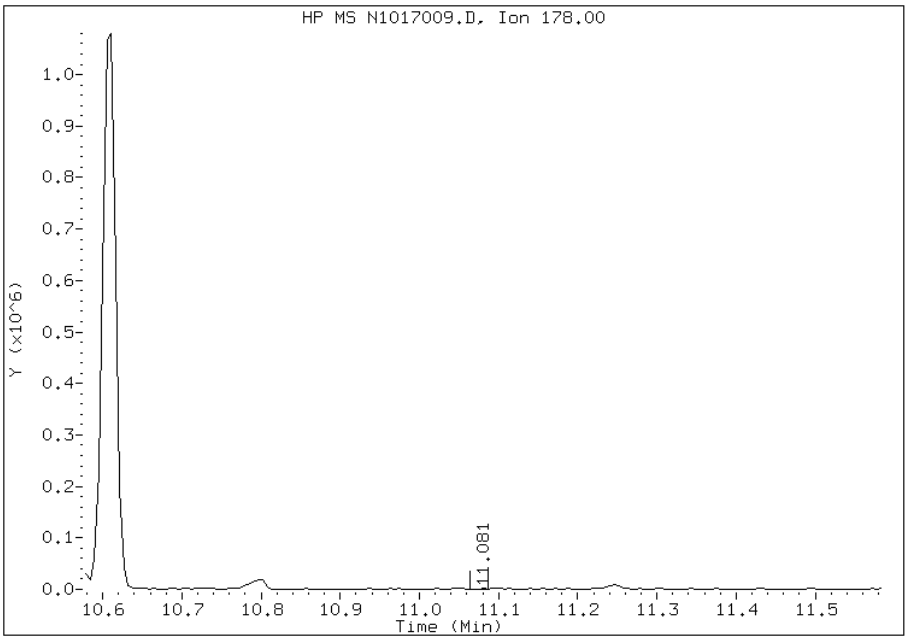
Processing Integration Results

RT: 11.08

Response: 1303

Amount: 0

Conc: 0



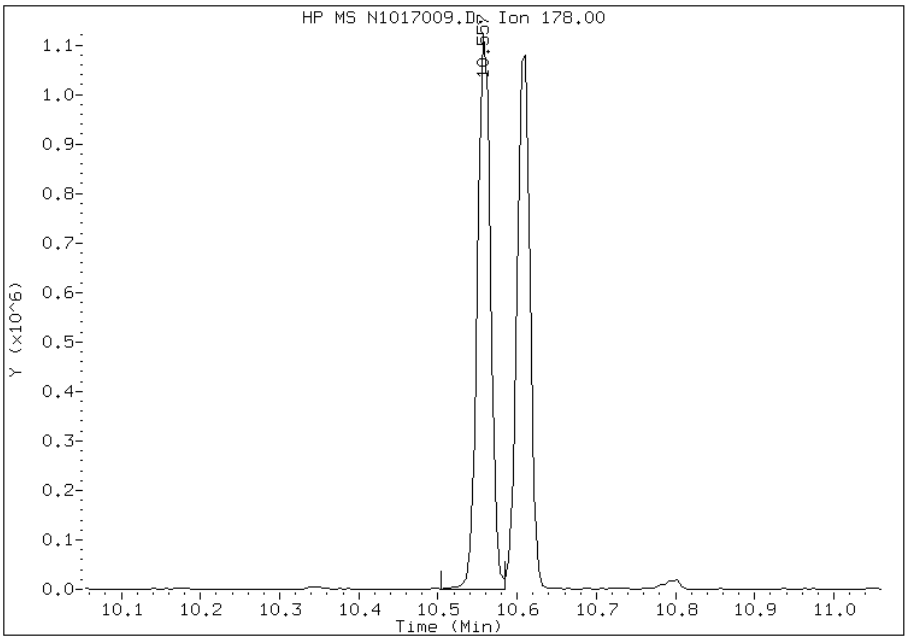
Manual Integration Results

RT: 10.56

Response: 1279286

Amount: 23

Conc: 23



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 06:01
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N1017009.D
Inj. Date and Time: 17-OCT-2013 15:31
Instrument ID: 733.i
Client ID:
Compound: 98 4,6-Dinitro-2-methylphenol
CAS #: 534-52-1
Report Date: 10/18/2013

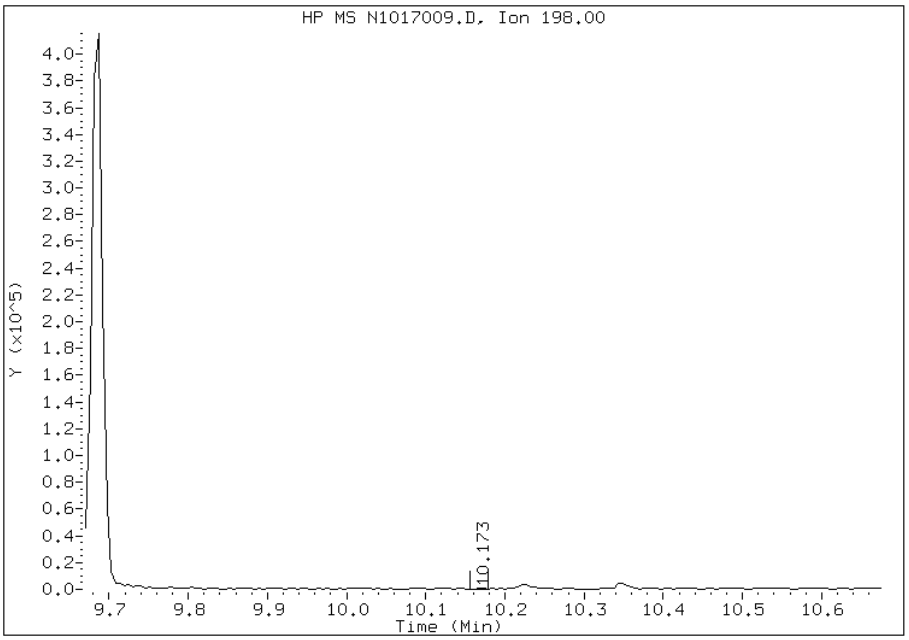
Processing Integration Results

RT: 10.17

Response: 505

Amount: 1

Conc: 1



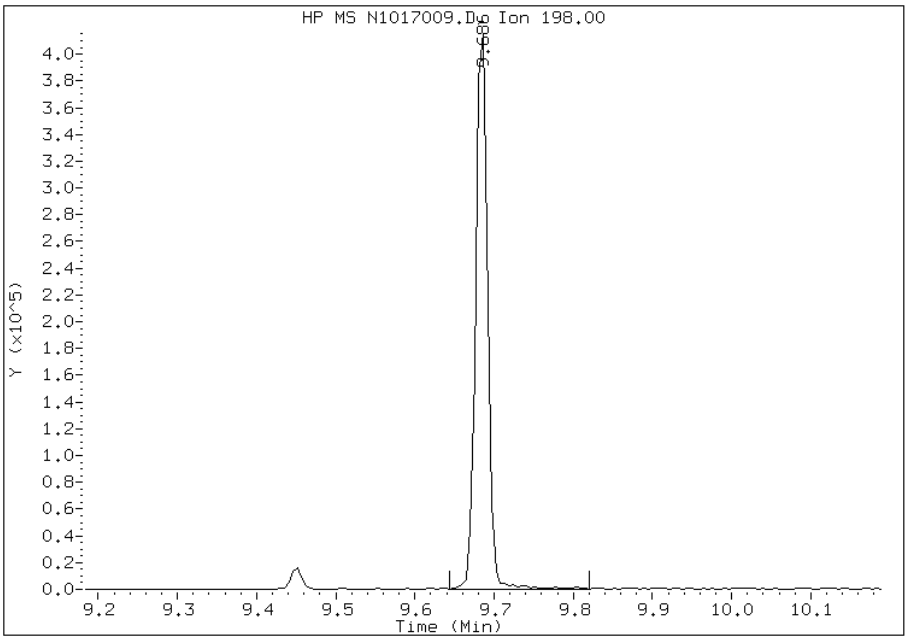
Manual Integration Results

RT: 9.69

Response: 431552

Amount: 58

Conc: 58



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 06:00
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N1017009.D
Inj. Date and Time: 17-OCT-2013 15:31
Instrument ID: 733.i
Client ID:
Compound: 111 Pentachlorophenol
CAS #: 87-86-5
Report Date: 10/18/2013

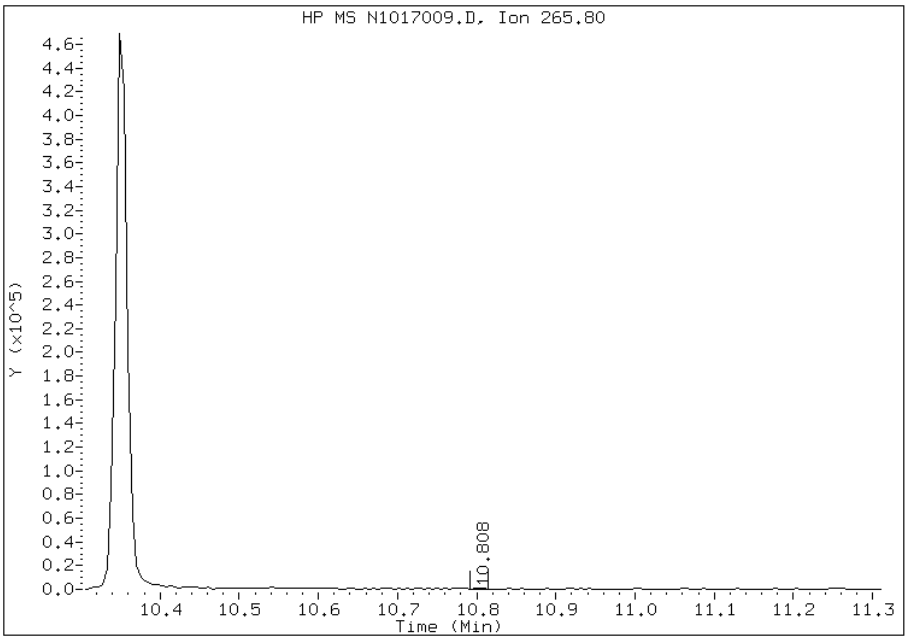
Processing Integration Results

RT: 10.81

Response: 725

Amount: 2

Conc: 2



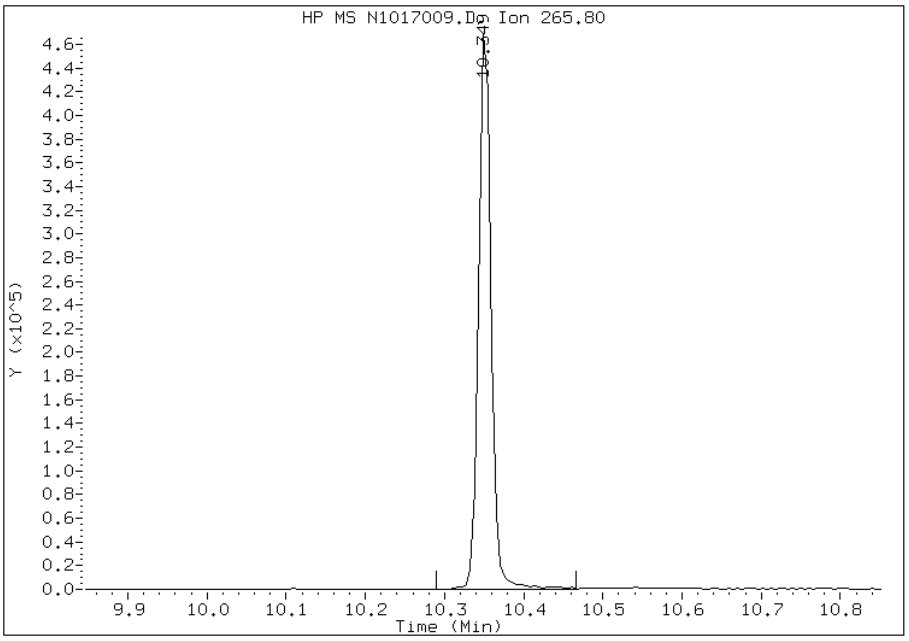
Manual Integration Results

RT: 10.35

Response: 507709

Amount: 60

Conc: 60



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 06:01
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N1017009.D
Inj. Date and Time: 17-OCT-2013 15:31
Instrument ID: 733.i
Client ID:
Compound: 210 Atrazine
CAS #: 1912-24-9
Report Date: 10/18/2013

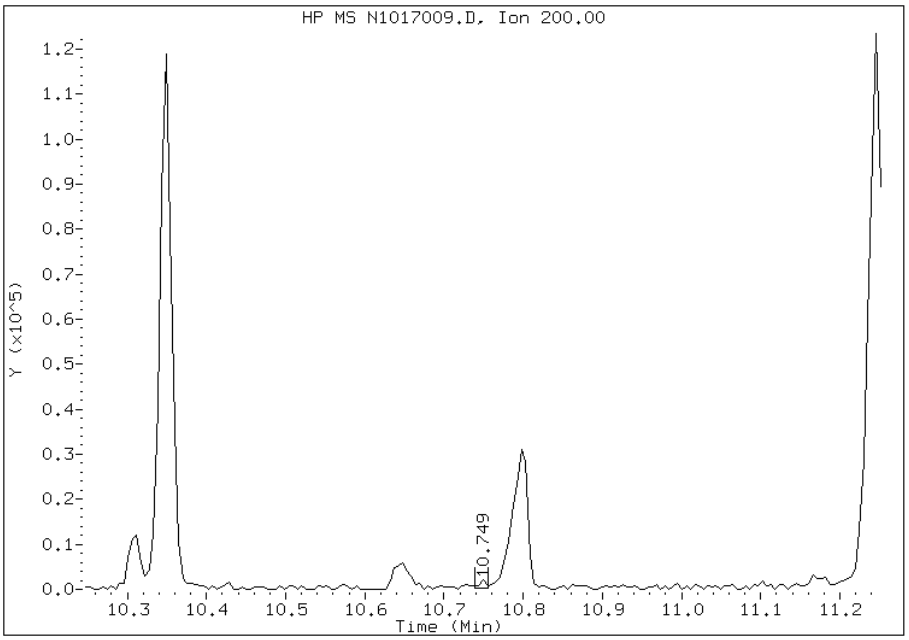
Processing Integration Results

RT: 10.75

Response: 1118

Amount: 0

Conc: 0



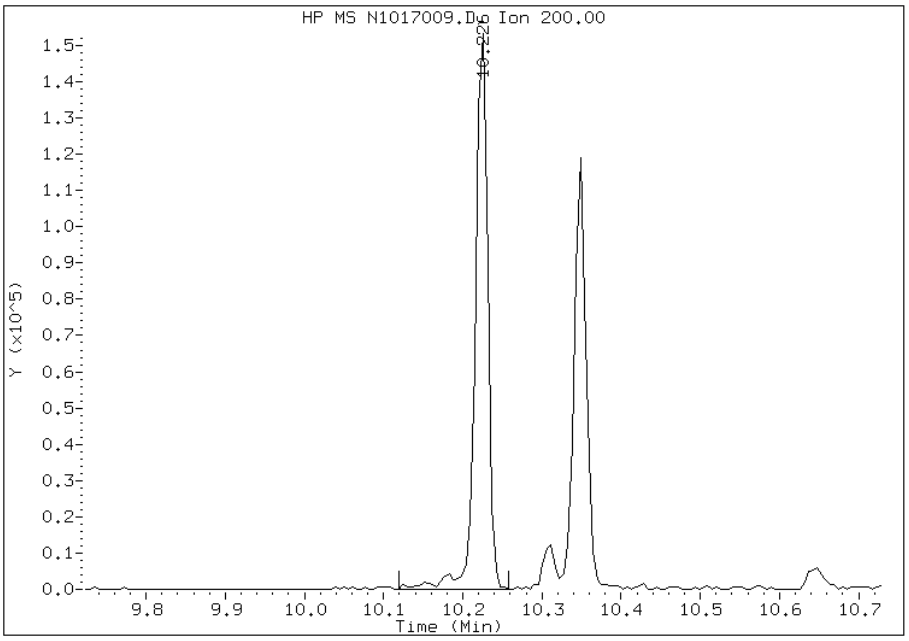
Manual Integration Results

RT: 10.23

Response: 167716

Amount: 16

Conc: 16



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 06:01
Manual Integration Reason: Peak Not Found

Manual Integration Report

Data File: N1017009.D
Inj. Date and Time: 17-OCT-2013 15:31
Instrument ID: 733.i
Client ID:
Compound: 208 Caprolactam
CAS #: 105-60-2
Report Date: 10/18/2013

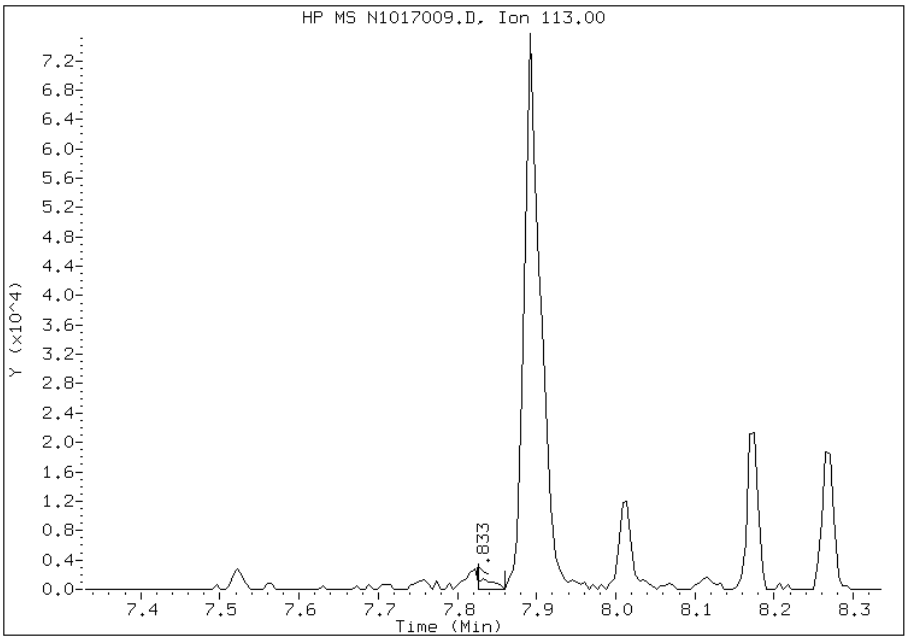
Processing Integration Results

RT: 7.83

Response: 1900

Amount: 0

Conc: 0



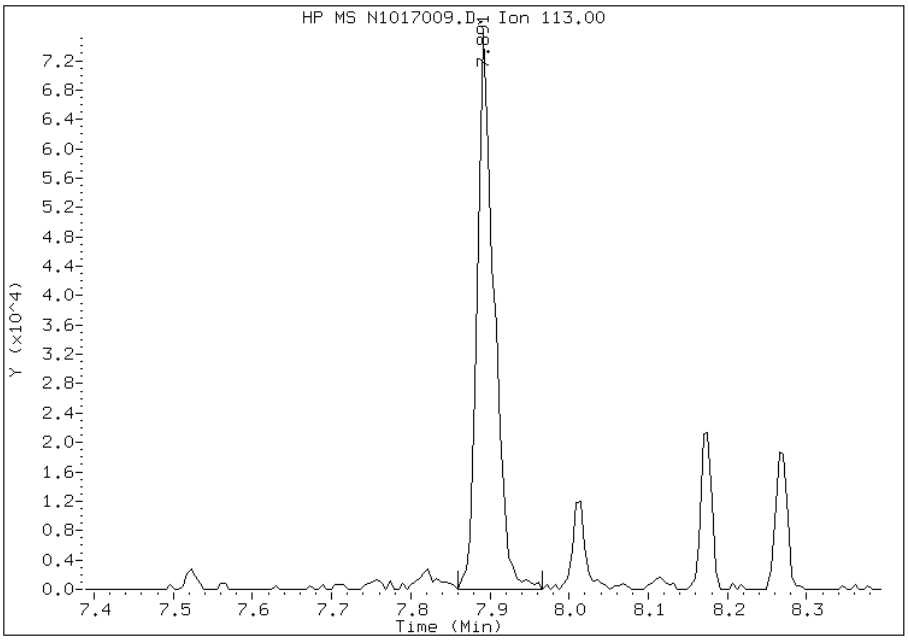
Manual Integration Results

RT: 7.89

Response: 111708

Amount: 29

Conc: 29



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 06:00
Manual Integration Reason: Peak Not Found

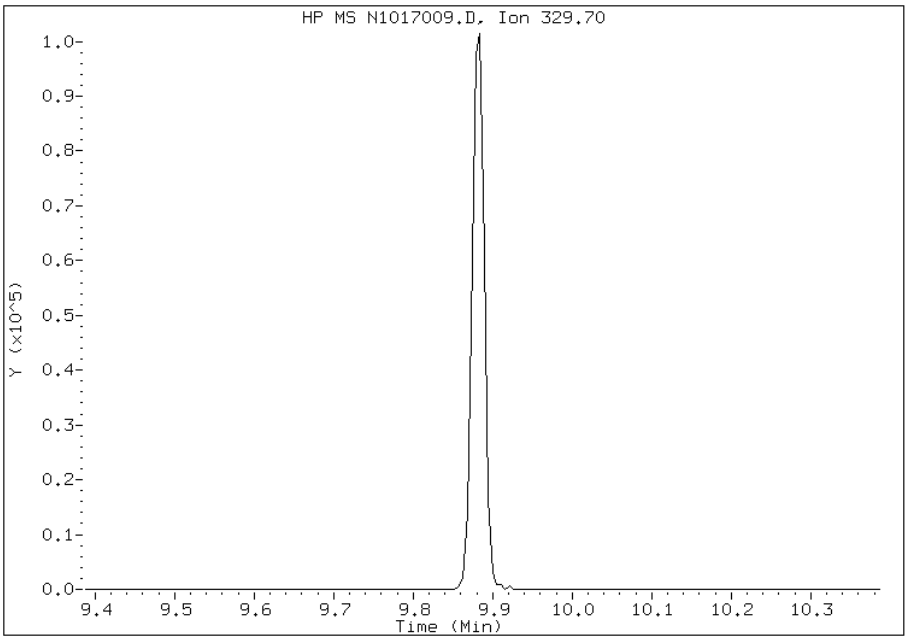
Manual Integration Report

Data File: N1017009.D
Inj. Date and Time: 17-OCT-2013 15:31
Instrument ID: 733.i
Client ID:
Compound: 159 2,4,6-Tribromophenol
CAS #: 118-79-6
Report Date: 10/18/2013

Processing Integration Results

Not Detected

Expected RT: 9.89



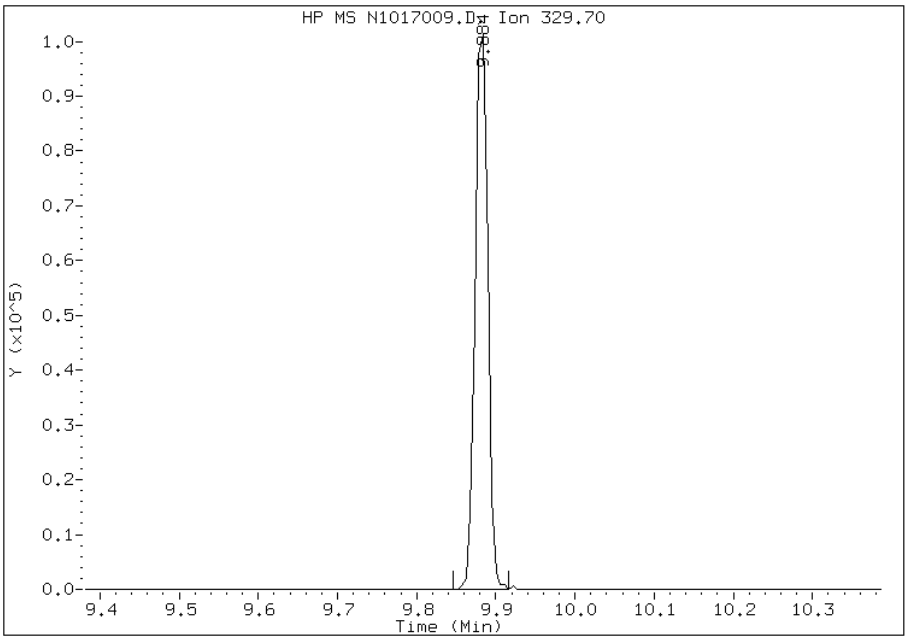
Manual Integration Results

RT: 9.88

Response: 111281

Amount: 26

Conc: 26



Manually Integrated By: piccolinov
Modification Date: 18-Oct-2013 06:02
Manual Integration Reason: Peak Not Found

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: 733 Start Date: 10/09/2013 05:09

Analysis Batch Number: 86218 End Date: 10/09/2013 09:13

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-86218/1		10/09/2013 05:09	1	N1009DF1.D	Rxi-5SilMS 0.32(mm)
IC 180-86218/2		10/09/2013 05:24	1	N1009IC1.D	Rxi-5SilMS 0.32(mm)
IC 180-86218/3		10/09/2013 05:49	1	N1009IC2.D	Rxi-5SilMS 0.32(mm)
IC 180-86218/4		10/09/2013 06:15	1	N1009IC3.D	Rxi-5SilMS 0.32(mm)
ICIS 180-86218/5		10/09/2013 06:40	1	N1009IC4.D	Rxi-5SilMS 0.32(mm)
IC 180-86218/6		10/09/2013 07:06	1	N1009IC5.D	Rxi-5SilMS 0.32(mm)
IC 180-86218/7		10/09/2013 07:31	1	N1009IC6.D	Rxi-5SilMS 0.32(mm)
IC 180-86218/8		10/09/2013 07:56	1	N1009IC7.D	Rxi-5SilMS 0.32(mm)
IC 180-86218/9		10/09/2013 08:22	1	N1009IC8.D	Rxi-5SilMS 0.32(mm)
ICV 180-86218/10		10/09/2013 08:47	1	N1009SV1.D	Rxi-5SilMS 0.32(mm)
ICV 180-86218/11		10/09/2013 09:13	1	N1009SV2.D	Rxi-5SilMS 0.32(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: 733 Start Date: 10/17/2013 10:57

Analysis Batch Number: 87081 End Date: 10/17/2013 22:01

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-87081/26		10/17/2013 10:57	1	N1017DF1.D	Rxi-5SilMS 0.32(mm)
CCVIS 180-87081/25		10/17/2013 11:11	1	N10170CC.D	Rxi-5SilMS 0.32(mm)
ZZZZZ		10/17/2013 11:37	1		Rxi-5SilMS 0.32(mm)
MB 180-86837/1-A		10/17/2013 12:03	1	N1017005.D	Rxi-5SilMS 0.32(mm)
ZZZZZ		10/17/2013 12:28	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/17/2013 12:54	1		Rxi-5SilMS 0.32(mm)
LCS 180-86837/2-A		10/17/2013 13:20	1	N1017006.D	Rxi-5SilMS 0.32(mm)
ZZZZZ		10/17/2013 13:46	1		Rxi-5SilMS 0.32(mm)
180-26012-1	MB-MW-02-20131009	10/17/2013 14:12	1	N1017007.D	Rxi-5SilMS 0.32(mm)
180-26012-1 MS	MB-MW-02-20131009 MS	10/17/2013 15:04	1	N1017008.D	Rxi-5SilMS 0.32(mm)
180-26012-1 MSD	MB-MW-02-20131009 MSD	10/17/2013 15:31	1	N1017009.D	Rxi-5SilMS 0.32(mm)
180-26012-2	MB-MW-01-20131009	10/17/2013 15:57	1	N1017010.D	Rxi-5SilMS 0.32(mm)
180-26012-3	MB-MW-03-20131009	10/17/2013 16:23	1	N1017011.D	Rxi-5SilMS 0.32(mm)
180-26012-4	MB-EB-20131009	10/17/2013 16:49	1	N1017012.D	Rxi-5SilMS 0.32(mm)
180-26012-5	MB-MW-04-20131009	10/17/2013 17:15	1	N1017013.D	Rxi-5SilMS 0.32(mm)
180-26012-7	DUP-20131009	10/17/2013 17:41	1	N1017014.D	Rxi-5SilMS 0.32(mm)
ZZZZZ		10/17/2013 18:07	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/17/2013 18:33	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/17/2013 18:58	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/17/2013 19:24	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/17/2013 19:50	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/17/2013 20:16	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/17/2013 20:42	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/17/2013 21:08	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/17/2013 21:34	1		Rxi-5SilMS 0.32(mm)
ZZZZZ		10/17/2013 22:01	1		Rxi-5SilMS 0.32(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: 733 Start Date: 10/18/2013 11:16

Analysis Batch Number: 87196 End Date: 10/18/2013 15:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-87196/9		10/18/2013 11:16	1	N1018DF1.D	Rxi-5SilMS 0.32(mm)
CCVIS 180-87196/8		10/18/2013 11:31	1	N10180CC.D	Rxi-5SilMS 0.32(mm)
MB 180-86943/1-A		10/18/2013 11:57	1	N1018002.D	Rxi-5SilMS 0.32(mm)
LCS 180-86943/2-A		10/18/2013 12:48	1	N1018003.D	Rxi-5SilMS 0.32(mm)
LCSD 180-86943/3-A		10/18/2013 13:14	1	N1018004.D	Rxi-5SilMS 0.32(mm)
ZZZZZ		10/18/2013 14:06	5		Rxi-5SilMS 0.32(mm)
180-26012-6	MB-MW-06-20131010	10/18/2013 14:32	1	N1018005.D	Rxi-5SilMS 0.32(mm)
180-26012-8	MB-MW-05-20131010	10/18/2013 14:58	1	N1018006.D	Rxi-5SilMS 0.32(mm)
180-26012-9	MB-EB-20131010	10/18/2013 15:24	1	N1018007.D	Rxi-5SilMS 0.32(mm)

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Batch Number: 86837 Batch Start Date: 10/16/13 11:15 Batch Analyst: Trout, Bill

Batch Method: 3520C Batch End Date: 10/17/13 05:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	FirstAdjustpH	OPLVISPKMIX1i 00017	OPQL8270SURi 00009
MB 180-86837/1		3520C, 8270D		5	1000 mL	10.0 mL	2		1 mL
LCS 180-86837/2		3520C, 8270D		5	1000 mL	10.0 mL	2	1 mL	1 mL
180-26012-B-1 MS	MB-MW-02-20131009	3520C, 8270D	T	7	1030 mL	10.0 mL	2	1 mL	1 mL
180-26012-B-1 MSD	MB-MW-02-20131009	3520C, 8270D	T	7	1050 mL	10.0 mL	2	1 mL	1 mL
180-26012-A-1	MB-MW-02-20131009	3520C, 8270D	T	7	1030 mL	10.0 mL	2		1 mL
180-26012-A-2	MB-MW-01-20131009	3520C, 8270D	T	7	1040 mL	10.0 mL	2		1 mL
180-26012-C-3	MB-MW-03-20131009	3520C, 8270D	T	7	1040 mL	10.0 mL	2		1 mL
180-26012-A-4	MB-EB-20131009	3520C, 8270D	T	6	1050 mL	10.0 mL	2		1 mL
180-26012-B-5	MB-MW-04-20131009	3520C, 8270D	T	7	1040 mL	10.0 mL	2		1 mL
180-26012-B-7	DUP-20131009	3520C, 8270D	T	7	1040 mL	10.0 mL	2		1 mL

Batch Notes	
Acid used for pH adjustment	1:1 Sulfuric acid
Acid used for pH adjust Lot #	895533
Person's name who did the concentration	cdm
N-evap #	1
Na2SO4 Lot Number	965232
pH Paper Lot Number	Ph paper HC270245
Prep Solvent Lot #	984624
Prep Solvent Name	Methylene chloride
Prep Solvent Volume Used	250 mL
Person's name who did the prep	BT
Sufficient volume for MS/MSD?	Yes
Uncorrected N-evap Temperature	26 Celsius
Uncorrected Temperature	75 Celsius

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Batch Number: 86837 Batch Start Date: 10/16/13 11:15 Batch Analyst: Trout, Bill

Batch Method: 3520C Batch End Date: 10/17/13 05:30

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Batch Number: 86943 Batch Start Date: 10/17/13 11:05 Batch Analyst: Trout, Bill

Batch Method: 3520C Batch End Date: 10/18/13 05:20

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	FirstAdjustpH	OPLVISPKMIX1i 00017	OPQL8270SURi 00009
MB 180-86943/1		3520C, 8270D		5	1000 mL	10.0 mL	2		1 mL
LCS 180-86943/2		3520C, 8270D		5	1000 mL	10.0 mL	2	1 mL	1 mL
LCSD 180-86943/3		3520C, 8270D		5	1000 mL	10.0 mL	2	1 mL	1 mL
180-26012-B-6	MB-MW-06-20131010	3520C, 8270D	T	7	1030 mL	10.0 mL	2		1 mL
180-26012-D-8	MB-MW-05-20131010	3520C, 8270D	T	7	1040 mL	10.0 mL	2		1 mL
180-26012-C-9	MB-EB-20131010	3520C, 8270D	T	5	1040 mL	10.0 mL	2		1 mL

Batch Notes	
Acid used for pH adjustment	1:1 Sulfuric acid
Acid used for pH adjust Lot #	895533
Person's name who did the concentration	bp/cdm
N-evap #	1
Na2SO4 Lot Number	965232
pH Paper Lot Number	Ph paper HC270245
Prep Solvent Lot #	984624
Prep Solvent Name	Methylene chloride
Prep Solvent Volume Used	250 mL
Person's name who did the prep	bt
Uncorrected N-evap Temperature	26 Celsius
Uncorrected Temperature	75 Celsius

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Method 8082A Low Level

Polychlorinated Biphenyls (PCBs) (GC) by Method 8082A Low Level

FORM II
GC SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low

GC Column (2): RTX-1701 ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	TCX2	#	DCB2	#
MB-MW-02-20131009	180-26012-1	140		74	
MB-MW-01-20131009	180-26012-2	139		91	
MB-MW-03-20131009	180-26012-3	121		83	
MB-EB-20131009	180-26012-4	114		87	
MB-MW-04-20131009	180-26012-5	143		95	
MB-MW-06-20131010	180-26012-6	72		47	X
DUP-20131009	180-26012-7	133		85	
MB-MW-05-20131010	180-26012-8	153	X	90	
MB-EB-20131010	180-26012-9	124		86	
	MB 180-86783/1-C	110		86	
	LCS 180-86783/2-C	115		89	
MB-MW-02-20131009 MS	180-26012-1 MS	128		77	
MB-MW-02-20131009 MSD	180-26012-1 MSD	141		86	

	QC LIMITS
TCX = Tetrachloro-m-xylene	47-150
DCB = DCB Decachlorobiphenyl (Surr)	50-140

Column to be used to flag recovery values

FORM II 8082A

FORM III
GC SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P1030669.D

Lab ID: LCS 180-86783/2-C Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
PCB-1016	1.00	1.14	114	60-110	*
PCB-1260	1.00	1.14	114	60-111	*

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM III
GC SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P1030658.D

Lab ID: 180-26012-1 MS Client ID: MB-MW-02-20131009 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
PCB-1016	0.990	ND	1.02	103	60-110	
PCB-1260	0.990	ND	1.02	103	60-111	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM III
GC SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P1030659.D

Lab ID: 180-26012-1 MSD Client ID: MB-MW-02-20131009 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
PCB-1016	0.990	1.13	114	9	27	60-110	F
PCB-1260	0.990	1.12	113	9	24	60-111	F

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM IV
GC SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: MB 180-86783/1-C

Matrix: Water Date Extracted: 10/15/2013 14:50

Lab File ID:(1) Lab File ID:(2) P1030668.D

Date Analyzed:(1) Date Analyzed:(2) 10/20/2013 04:46

Instrument ID:(1) Instrument ID:(2) GC8

GC Column:(1) ID: GC Column:(2) RTX-1701 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
MB-MW-02-20131009	180-26012-1		10/19/2013 23:25
MB-MW-02-20131009 MS	180-26012-1 MS		10/19/2013 23:54
MB-MW-02-20131009 MSD	180-26012-1 MSD		10/20/2013 00:23
MB-MW-03-20131009	180-26012-3		10/20/2013 01:22
MB-EB-20131009	180-26012-4		10/20/2013 01:51
DUP-20131009	180-26012-7		10/20/2013 03:19
MB-MW-05-20131010	180-26012-8		10/20/2013 03:48
MB-EB-20131010	180-26012-9		10/20/2013 04:17
	LCS 180-86783/2-C		10/20/2013 05:15
MB-MW-01-20131009	180-26012-2		10/21/2013 10:24
MB-MW-04-20131009	180-26012-5		10/21/2013 10:54
MB-MW-06-20131010	180-26012-6		10/21/2013 11:23

FORM VIII
GC SEMI VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Sample No.: CCVRT 180-87359/8 Date Analyzed: 10/19/2013 22:56

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm)

Lab File ID (Standard): P1030656.D Heated Purge: (Y/N) N

Calibration ID: 11841

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				6.37	18.24	
UPPER LIMIT				6.42	18.29	
LOWER LIMIT				6.32	18.19	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 180-87359/8		10/19/2013 22:56	P1030656.D	6.37	18.24	
180-26012-1	MB-MW-02-20131009	10/19/2013 23:25	P1030657.D	6.37	18.23	
180-26012-1 MS	MB-MW-02-20131009 MS	10/19/2013 23:54	P1030658.D	6.37	18.23	
180-26012-1 MSD	MB-MW-02-20131009 MSD	10/20/2013 00:23	P1030659.D	6.37	18.23	
180-26012-3	MB-MW-03-20131009	10/20/2013 01:22	P1030661.D	6.37	18.23	
180-26012-4	MB-EB-20131009	10/20/2013 01:51	P1030662.D	6.37	18.23	
180-26012-7	DUP-20131009	10/20/2013 03:19	P1030665.D	6.37	18.23	
180-26012-8	MB-MW-05-20131010	10/20/2013 03:48	P1030666.D	6.36	18.23	
180-26012-9	MB-EB-20131010	10/20/2013 04:17	P1030667.D	6.37	18.23	
MB 180-86783/1-C		10/20/2013 04:46	P1030668.D	6.37	18.23	
LCS 180-86783/2-C		10/20/2013 05:15	P1030669.D	6.37	18.23	
CCV 180-87359/19		10/20/2013 05:45	P1030670.D	6.37	18.23	
CCV 180-87359/20		10/21/2013 09:55	P1030720.D	6.37	18.23	
180-26012-2	MB-MW-01-20131009	10/21/2013 10:24	P1030721.D	6.37	18.23	
180-26012-5	MB-MW-04-20131009	10/21/2013 10:54	P1030722.D	6.37	18.23	
180-26012-6	MB-MW-06-20131010	10/21/2013 11:23	P1030723.D	6.37	18.24	
CCV 180-87359/24		10/21/2013 12:51	P1030726.D	6.38	18.24	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl (Surr)

TCX RT Limit = ± 0.05 minutes of surrogate RT
DCB RT Limit = ± 0.05 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-02-20131009 MS Lab Sample ID: 180-26012-1 MS

Instrument ID (1): Instrument ID (2): GC8

Date Analyzed (1): Date Analyzed (2): 10/19/2013 23:54

GC Column (1): ID: GC Column (2): RTX-1701 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		
				FROM	TO	PEAK	MEAN	
PCB-1016	2	1	7.40	7.35	7.45	1.06	1.02	
		2	8.02	7.99	8.09	1.18		
		3	8.37	8.34	8.44	0.994		
		4	8.93	8.89	8.99	0.993		
		5	9.66	9.62	9.72	0.890		
PCB-1260	2	1	11.37	11.33	11.43	0.979	1.02	
		2	11.91	11.87	11.97	1.05		
		3	12.79	12.75	12.85	1.05		
		4	13.81	13.77	13.87	0.973		
		5	14.63	14.59	14.69	1.03		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-02-20131009 MSD Lab Sample ID: 180-26012-1 MSD

Instrument ID (1): Instrument ID (2): GC8

Date Analyzed (1): Date Analyzed (2): 10/20/2013 00:23

GC Column (1): ID: GC Column (2): RTX-1701 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		
				FROM	TO	PEAK	MEAN	
PCB-1016	2	1	7.40	7.35	7.45	1.16	1.13	
		2	8.02	7.99	8.09	1.26		
		3	8.37	8.34	8.44	1.11		
		4	8.93	8.89	8.99	1.09		
		5	9.66	9.62	9.72	1.00		
PCB-1260	2	1	11.37	11.33	11.43	1.07	1.12	
		2	11.91	11.87	11.97	1.14		
		3	12.79	12.75	12.85	1.16		
		4	13.81	13.77	13.87	1.07		
		5	14.63	14.59	14.69	1.14		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-86783/2-C

Instrument ID (1): Instrument ID (2): GC8

Date Analyzed (1): Date Analyzed (2): 10/20/2013 05:15

GC Column (1): ID: GC Column (2): RTX-1701 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		
				FROM	TO	PEAK	MEAN	
PCB-1016	2	1	7.40	7.35	7.45	1.13	1.14	
		2	8.02	7.99	8.09	1.32		
		3	8.38	8.34	8.44	1.06		
		4	8.94	8.89	8.99	1.10		
		5	9.66	9.62	9.72	1.09		
PCB-1260	2	1	11.37	11.33	11.43	1.09	1.14	
		2	11.91	11.87	11.97	1.14		
		3	12.79	12.75	12.85	1.18		
		4	13.81	13.77	13.87	1.12		
		5	14.63	14.59	14.69	1.15		

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-02-20131009 Lab Sample ID: 180-26012-1

Matrix: Water Lab File ID: P1030657.D

Analysis Method: 8082A Date Collected: 10/09/2013 11:15

Extraction Method: 3510C Date Extracted: 10/15/2013 14:50

Sample wt/vol: 1060(mL) Date Analyzed: 10/19/2013 23:25

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-1701 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 87359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	ND		0.0094	0.0024
11104-28-2	PCB-1221	ND		0.0094	0.0023
11141-16-5	PCB-1232	ND		0.0094	0.0028
53469-21-9	PCB-1242	ND		0.0094	0.0018
12672-29-6	PCB-1248	ND		0.0094	0.0021
11097-69-1	PCB-1254	ND		0.0094	0.0022
11096-82-5	PCB-1260	ND		0.0094	0.0013
37324-23-5	PCB-1262	ND		0.0094	0.0019
11100-14-4	PCB-1268	ND		0.0094	0.0026

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	74		50-140
877-09-8	Tetrachloro-m-xylene	140		47-150

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030657.D
Report Date: 21-Oct-2013 07:55

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030657.D
Lab Smp Id: 180-26012-D-1-C Client Smp ID: MB-MW-02-20131009
Inj Date : 19-OCT-2013 23:25
Operator : 402360 Inst ID: gc8.i
Smp Info : 10183B8082ALL.b
Misc Info : 180-26012-D-1-C
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\PCBBALL.m
Meth Date : 21-Oct-2013 07:53 guptaa Quant Type: ESTD
Cal Date : 15-OCT-2013 03:14 Cal File: P1030424.D
Als bottle: 34
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)		
RT	EXP RT	DLT RT	RESPONSE			TARGET RANGE	RATIO
$ 2 Tetrachloro-m-xylene					CAS #: 877-09-8		
6.368	6.389	-0.021	1297399	0.02793	0.027930		(RM)
1 Aroclor-1221					CAS #: 11104-28-2		
Operator disabled compound identification.							
4 Aroclor-1016					CAS #: 12674-11-2		
Operator disabled compound identification.							
3 Aroclor-1232					CAS #: 11141-16-5		
Operator disabled compound identification.							
6 Aroclor-1248					CAS #: 12672-29-6		
Operator disabled compound identification.							
5 Aroclor-1242					CAS #: 53469-21-9		
Operator disabled compound identification.							

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030657.D
Report Date: 21-Oct-2013 07:55

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO

7 Aroclor-1254 CAS #: 11097-69-1

Operator disabled compound identification.

---

9 Aroclor-1262 CAS #: 37324-23-5

Peaks not detected for Quant. or Qual. signal(s).

---

8 Aroclor-1260 CAS #: 11096-82-5

Operator disabled compound identification.

---

10 Aroclor-1268 CAS #: 11100-14-4

Operator disabled compound identification.

$ 11 DCB Decachlorobiphenyl (Surr) CAS #: 2051-24-3

18.233	18.246	-0.013	325613	0.01478	0.014784		(R)

QC Flag Legend

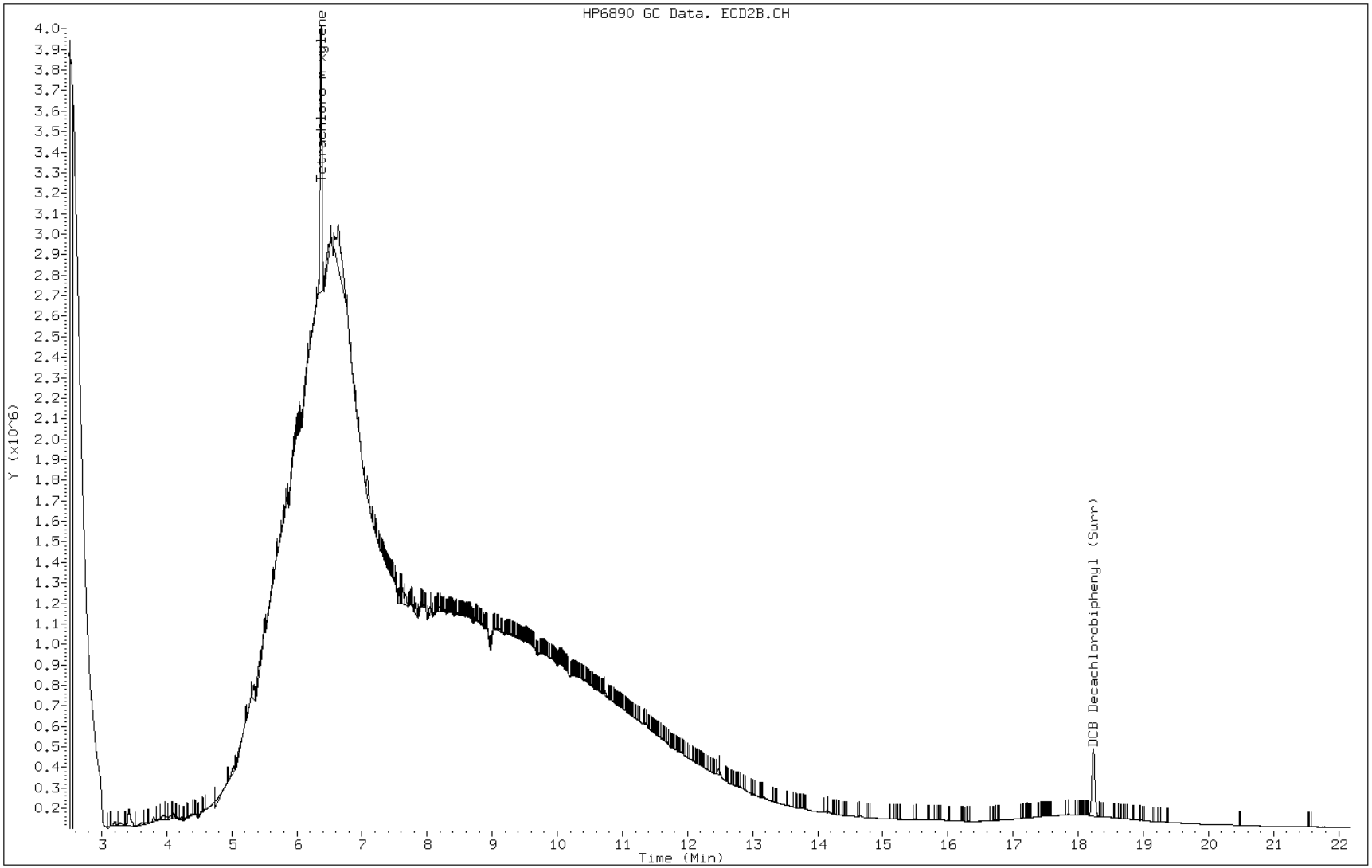
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: P1030657.D

Date: 19-OCT-2013 23:25

Client ID: MB-MW-02-20131009 Instrument: gc8.i

Sample Info: 10183B8082ALL.b Operator: 402360



Manual Integration Report

Data File: P1030657.D
Inj. Date and Time: 19-OCT-2013 23:25
Instrument ID: gc8.i
Client ID: MB-MW-02-20131009
Compound: 2 Tetrachloro-m-xylene
CAS #: 877-09-8
Report Date: 10/21/2013

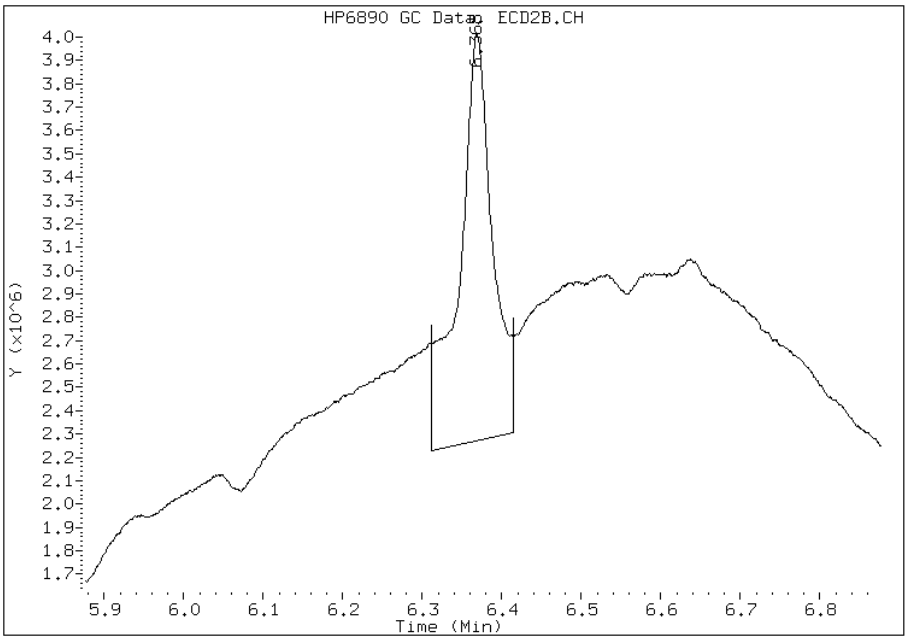
Processing Integration Results

RT: 6.37

Response: 1743639

Amount: 0.04

Conc: 0.04



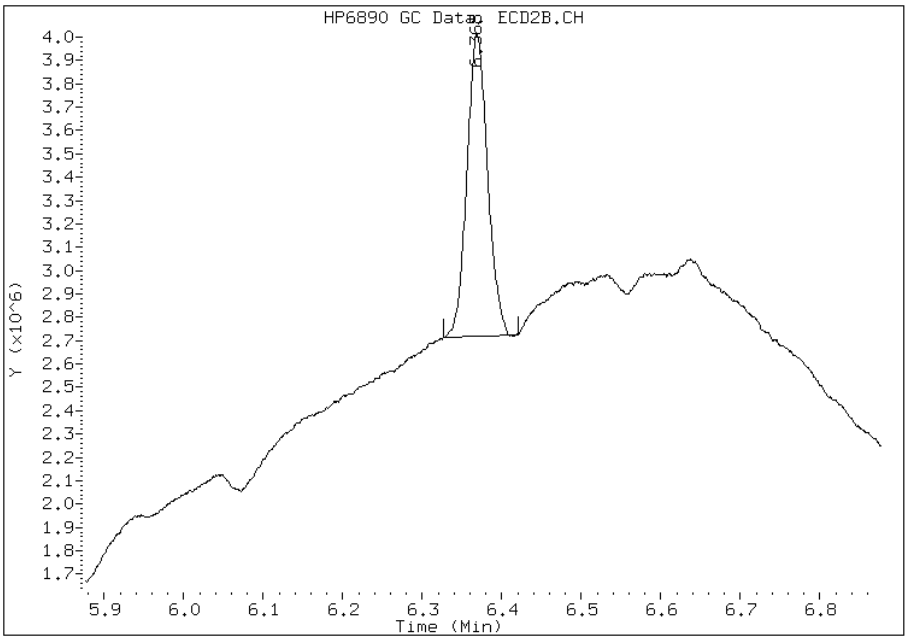
Manual Integration Results

RT: 6.37

Response: 1297399

Amount: 0.03

Conc: 0.03



Manually Integrated By: guptaa
Modification Date: 21-Oct-2013 07:54
Manual Integration Reason:

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-01-20131009 Lab Sample ID: 180-26012-2

Matrix: Water Lab File ID: P1030721.D

Analysis Method: 8082A Date Collected: 10/09/2013 13:00

Extraction Method: 3510C Date Extracted: 10/15/2013 14:50

Sample wt/vol: 1050(mL) Date Analyzed: 10/21/2013 10:24

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-1701 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 87359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	ND		0.0095	0.0024
11104-28-2	PCB-1221	ND		0.0095	0.0024
11141-16-5	PCB-1232	ND		0.0095	0.0028
53469-21-9	PCB-1242	ND		0.0095	0.0018
12672-29-6	PCB-1248	ND		0.0095	0.0022
11097-69-1	PCB-1254	ND		0.0095	0.0022
11096-82-5	PCB-1260	ND		0.0095	0.0013
37324-23-5	PCB-1262	ND		0.0095	0.0020
11100-14-4	PCB-1268	ND		0.0095	0.0026

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	91		50-140
877-09-8	Tetrachloro-m-xylene	139		47-150

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030721.D
Report Date: 21-Oct-2013 12:33

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030721.D
Lab Smp Id: 180-26012-D-2-C Client Smp ID: MB-MW-01-20131009
Inj Date : 21-OCT-2013 10:24
Operator : 402360 Inst ID: gc8.i
Smp Info : 10183B8082ALL.b
Misc Info : 180-26012-D-2-C
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\PCBBALL.m
Meth Date : 21-Oct-2013 12:26 guptaa Quant Type: ESTD
Cal Date : 15-OCT-2013 03:14 Cal File: P1030424.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
$ 2 Tetrachloro-m-xylene					CAS #: 877-09-8		
6.366	6.369	-0.003	1291925	0.02781	0.027812		(RM)

---

1 Aroclor-1221 CAS #: 11104-28-2

Operator disabled compound identification.

---

4 Aroclor-1016 CAS #: 12674-11-2

Operator disabled compound identification.

---

3 Aroclor-1232 CAS #: 11141-16-5

Operator disabled compound identification.

---

6 Aroclor-1248 CAS #: 12672-29-6

Operator disabled compound identification.

---

5 Aroclor-1242 CAS #: 53469-21-9

Operator disabled compound identification.

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030721.D
Report Date: 21-Oct-2013 12:33

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/L)	TARGET RANGE	RATIO

7 Aroclor-1254 CAS #: 11097-69-1

Operator disabled compound identification.

---

9 Aroclor-1262 CAS #: 37324-23-5

Operator disabled compound identification.

---

8 Aroclor-1260 CAS #: 11096-82-5

Operator disabled compound identification.

---

10 Aroclor-1268 CAS #: 11100-14-4

Operator disabled compound identification.

$ 11 DCB Decachlorobiphenyl (Surr)						CAS #: 2051-24-3	
18.230	18.227	0.003	404064	0.01835	0.018346		(R)

QC Flag Legend

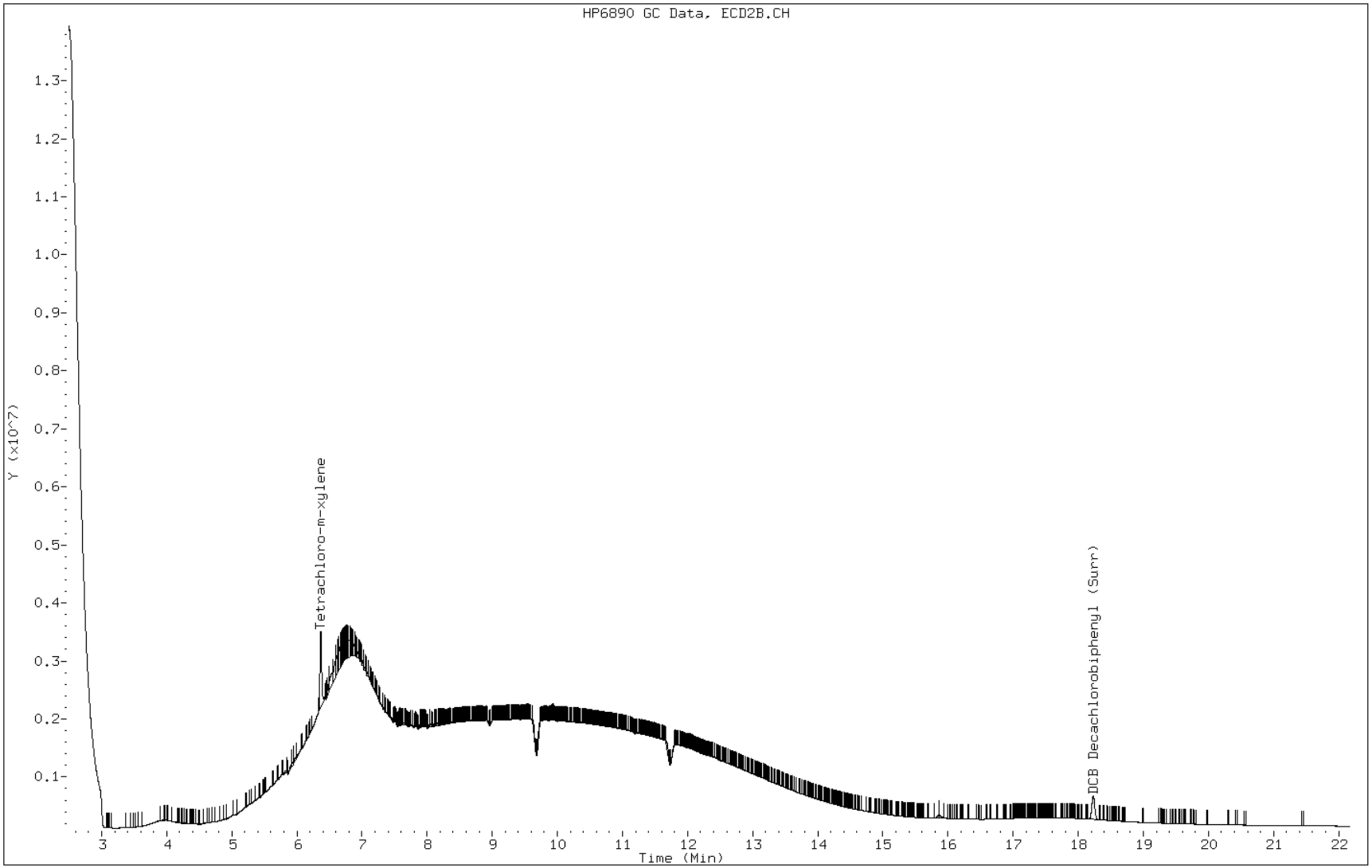
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: P1030721.D

Date: 21-OCT-2013 10:24

Client ID: MB-MW-01-20131009 Instrument: gc8.i

Sample Info: 10183B8082ALL.b Operator: 402360



Manual Integration Report

Data File: P1030721.D
Inj. Date and Time: 21-OCT-2013 10:24
Instrument ID: gc8.i
Client ID: MB-MW-01-20131009
Compound: 2 Tetrachloro-m-xylene
CAS #: 877-09-8
Report Date: 10/21/2013

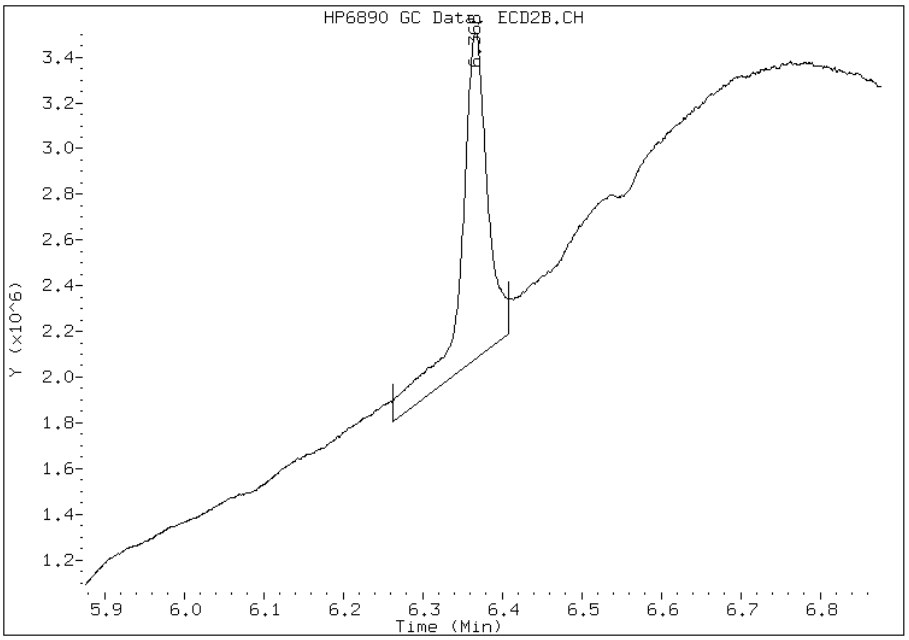
Processing Integration Results

RT: 6.37

Response: 1425823

Amount: 0.03

Conc: 0.03



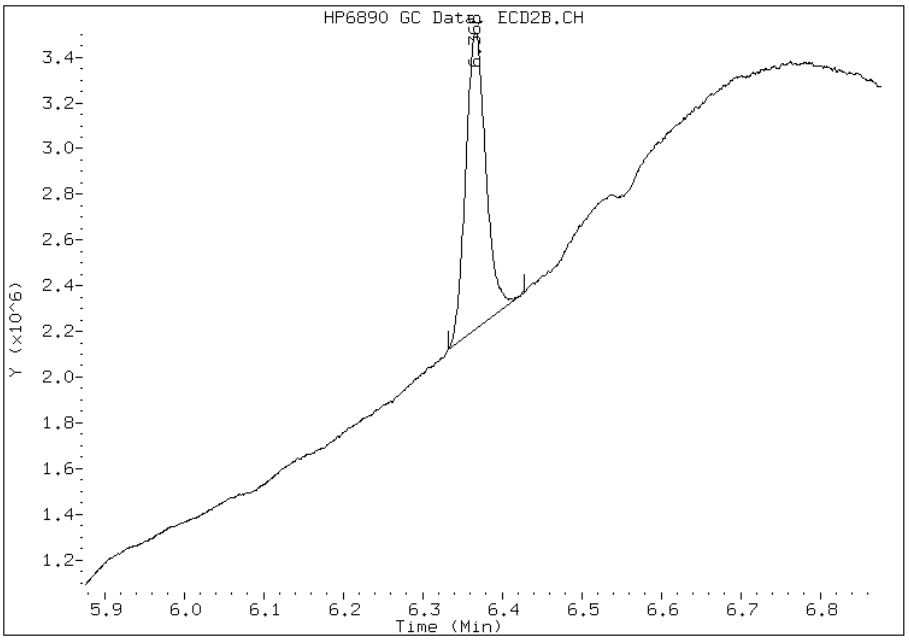
Manual Integration Results

RT: 6.37

Response: 1291925

Amount: 0.03

Conc: 0.03



Manually Integrated By: guptaa
Modification Date: 21-Oct-2013 12:27
Manual Integration Reason:

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-03-20131009 Lab Sample ID: 180-26012-3

Matrix: Water Lab File ID: P1030661.D

Analysis Method: 8082A Date Collected: 10/09/2013 14:05

Extraction Method: 3510C Date Extracted: 10/15/2013 14:50

Sample wt/vol: 1050(mL) Date Analyzed: 10/20/2013 01:22

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-1701 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 87359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	ND		0.0095	0.0024
11104-28-2	PCB-1221	ND		0.0095	0.0024
11141-16-5	PCB-1232	ND		0.0095	0.0028
53469-21-9	PCB-1242	ND		0.0095	0.0018
12672-29-6	PCB-1248	ND		0.0095	0.0022
11097-69-1	PCB-1254	ND		0.0095	0.0022
11096-82-5	PCB-1260	ND		0.0095	0.0013
37324-23-5	PCB-1262	ND		0.0095	0.0020
11100-14-4	PCB-1268	ND		0.0095	0.0026

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	83		50-140
877-09-8	Tetrachloro-m-xylene	121		47-150

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030661.D
Report Date: 21-Oct-2013 15:29

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030661.D
Lab Smp Id: 180-26012-D-3-C Client Smp ID: MB-MW-03-20131009
Inj Date : 20-OCT-2013 01:22
Operator : 402360 Inst ID: gc8.i
Smp Info : 10183B8082ALL.b
Misc Info : 180-26012-D-3-C
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\PCBBALL.m
Meth Date : 21-Oct-2013 13:46 guptaa Quant Type: ESTD
Cal Date : 15-OCT-2013 03:14 Cal File: P1030424.D
Als bottle: 38
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
$ 2 Tetrachloro-m-xylene					CAS #: 877-09-8		
6.370	6.376	-0.006	1122638	0.02417	0.024168		(R)
1 Aroclor-1221					CAS #: 11104-28-2		
Operator disabled compound identification.							
4 Aroclor-1016					CAS #: 12674-11-2		
Operator disabled compound identification.							
3 Aroclor-1232					CAS #: 11141-16-5		
Operator disabled compound identification.							
6 Aroclor-1248					CAS #: 12672-29-6		
Operator disabled compound identification.							
5 Aroclor-1242					CAS #: 53469-21-9		
Peaks not detected for Quant. or Qual. signal(s).							

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030661.D
Report Date: 21-Oct-2013 15:29

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
7 Aroclor-1254					CAS #: 11097-69-1		
Operator disabled compound identification.							
9 Aroclor-1262					CAS #: 37324-23-5		
Peaks not detected for Quant. or Qual. signal(s).							
8 Aroclor-1260					CAS #: 11096-82-5		
Operator disabled compound identification.							
10 Aroclor-1268					CAS #: 11100-14-4		
Operator disabled compound identification.							
$ 11 DCB Decachlorobiphenyl (Surr)					CAS #: 2051-24-3		
18.234	18.237	-0.003	366790	0.01665	0.016654		(R)

QC Flag Legend

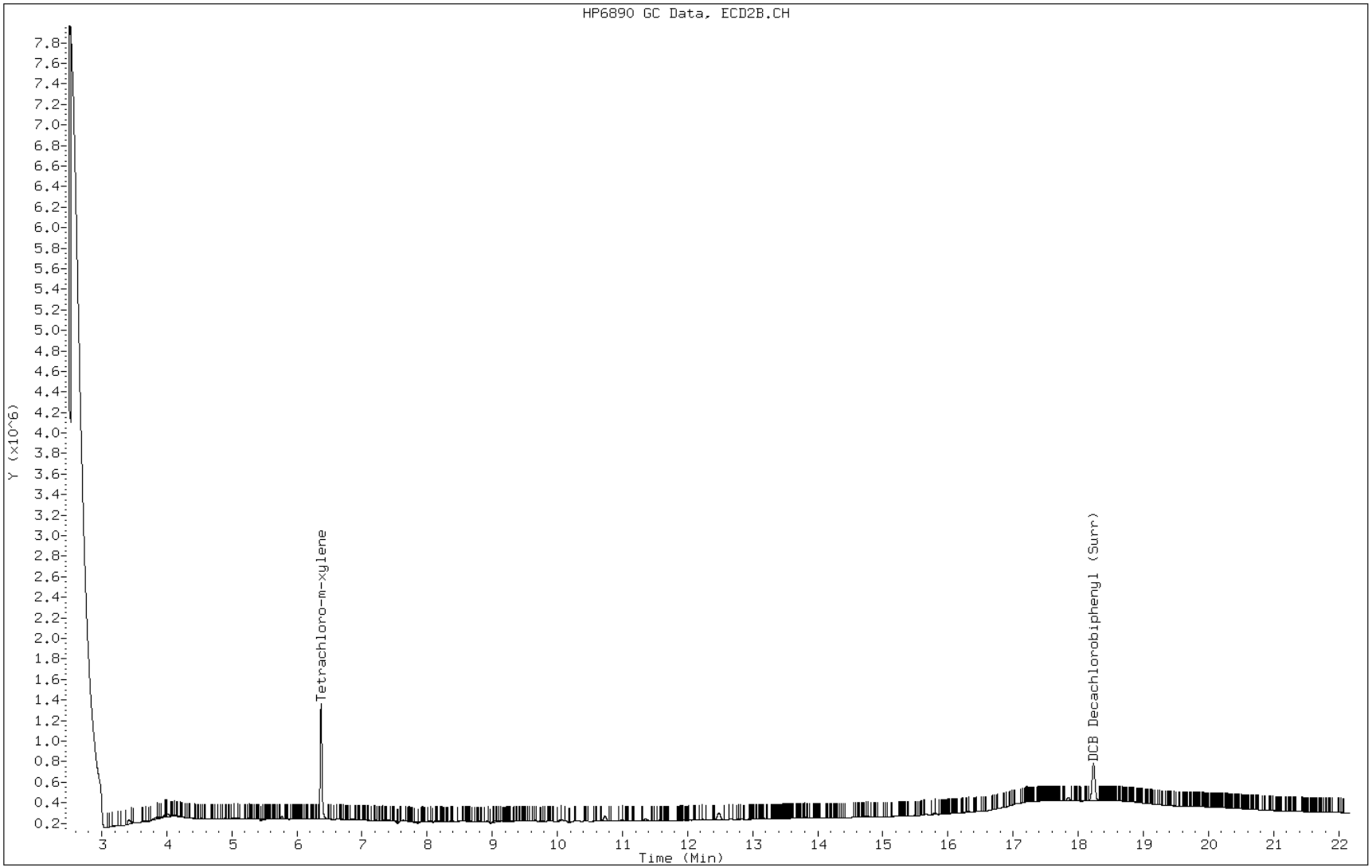
R - Spike/Surrogate failed recovery limits.

Data File: P1030661.D

Date: 20-OCT-2013 01:22

Client ID: MB-MW-03-20131009 Instrument: gc8.i

Sample Info: 10183B8082ALL.b Operator: 402360



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-EB-20131009 Lab Sample ID: 180-26012-4

Matrix: Water Lab File ID: P1030662.D

Analysis Method: 8082A Date Collected: 10/09/2013 15:30

Extraction Method: 3510C Date Extracted: 10/15/2013 14:50

Sample wt/vol: 1050(mL) Date Analyzed: 10/20/2013 01:51

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-1701 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 87359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	ND		0.0095	0.0024
11104-28-2	PCB-1221	ND		0.0095	0.0024
11141-16-5	PCB-1232	ND		0.0095	0.0028
53469-21-9	PCB-1242	ND		0.0095	0.0018
12672-29-6	PCB-1248	ND		0.0095	0.0022
11097-69-1	PCB-1254	ND		0.0095	0.0022
11096-82-5	PCB-1260	ND		0.0095	0.0013
37324-23-5	PCB-1262	ND		0.0095	0.0020
11100-14-4	PCB-1268	ND		0.0095	0.0026

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	87		50-140
877-09-8	Tetrachloro-m-xylene	114		47-150

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030662.D
Report Date: 21-Oct-2013 15:29

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030662.D
Lab Smp Id: 180-26012-C-4-C Client Smp ID: MB-EB-20131009
Inj Date : 20-OCT-2013 01:51
Operator : 402360 Inst ID: gc8.i
Smp Info : 10193B8082ALL.b
Misc Info : 180-26012-C-4-C
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\PCBBALL.m
Meth Date : 21-Oct-2013 13:46 guptaa Quant Type: ESTD
Cal Date : 15-OCT-2013 03:14 Cal File: P1030424.D
Als bottle: 39
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
$ 2 Tetrachloro-m-xylene					CAS #: 877-09-8		
6.372	6.376	-0.004	1063135	0.02289	0.022887		(R)
1 Aroclor-1221					CAS #: 11104-28-2		
Peaks not detected for Quant. or Qual. signal(s).							
4 Aroclor-1016					CAS #: 12674-11-2		
Peaks not detected for Quant. or Qual. signal(s).							
3 Aroclor-1232					CAS #: 11141-16-5		
Operator disabled compound identification.							
6 Aroclor-1248					CAS #: 12672-29-6		
Peaks not detected for Quant. or Qual. signal(s).							
5 Aroclor-1242					CAS #: 53469-21-9		
Operator disabled compound identification.							

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030662.D
Report Date: 21-Oct-2013 15:29

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO

7 Aroclor-1254 CAS #: 11097-69-1

Operator disabled compound identification.

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9 Aroclor-1262 CAS #: 37324-23-5

Operator disabled compound identification.

---

8 Aroclor-1260 CAS #: 11096-82-5

Operator disabled compound identification.

---

10 Aroclor-1268 CAS #: 11100-14-4

Peaks not detected for Quant. or Qual. signal(s).

$ 11 DCB Decachlorobiphenyl (Surr) CAS #: 2051-24-3

18.233	18.237	-0.004	384930	0.01748	0.017478		(R)

QC Flag Legend

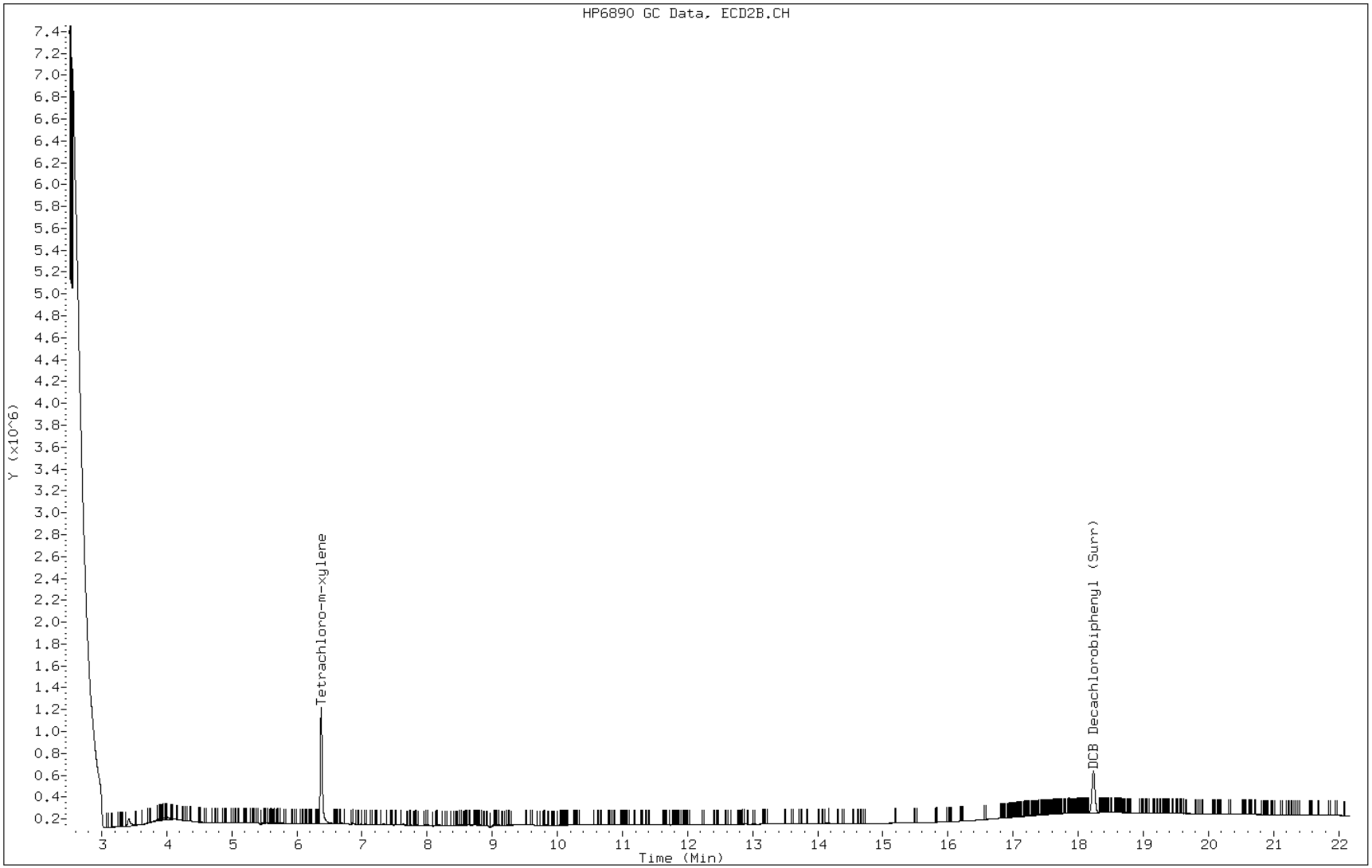
R - Spike/Surrogate failed recovery limits.

Data File: P1030662.D

Date: 20-OCT-2013 01:51

Client ID: MB-EB-20131009 Instrument: gc8.i

Sample Info: 10193B8082ALL.b Operator: 402360



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-04-20131009 Lab Sample ID: 180-26012-5

Matrix: Water Lab File ID: P1030722.D

Analysis Method: 8082A Date Collected: 10/09/2013 10:52

Extraction Method: 3510C Date Extracted: 10/15/2013 14:50

Sample wt/vol: 1060(mL) Date Analyzed: 10/21/2013 10:54

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-1701 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 87359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	ND		0.0094	0.0024
11104-28-2	PCB-1221	ND		0.0094	0.0023
11141-16-5	PCB-1232	ND		0.0094	0.0028
53469-21-9	PCB-1242	0.095		0.0094	0.0018
12672-29-6	PCB-1248	ND		0.0094	0.0021
11097-69-1	PCB-1254	ND		0.0094	0.0022
11096-82-5	PCB-1260	ND		0.0094	0.0013
37324-23-5	PCB-1262	ND		0.0094	0.0019
11100-14-4	PCB-1268	ND		0.0094	0.0026

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	95		50-140
877-09-8	Tetrachloro-m-xylene	143		47-150

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030722.D
Report Date: 21-Oct-2013 16:00

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030722.D
Lab Smp Id: 180-26012-D-5-C Client Smp ID: MB-MW-04-20131009
Inj Date : 21-OCT-2013 10:54
Operator : 402360 Inst ID: gc8.i
Smp Info : 10183B8082ALL.b
Misc Info : 180-26012-D-5-C
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\PCBBALL.m
Meth Date : 21-Oct-2013 13:46 guptaa Quant Type: ESTD
Cal Date : 15-OCT-2013 03:14 Cal File: P1030424.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 4.14 Sample Matrix: WATER

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 2 Tetrachloro-m-xylene					CAS #: 877-09-8		
6.368	6.376	-0.008	1328625	0.02860	0.028603		(R)
1 Aroclor-1221					CAS #: 11104-28-2		
Peaks not detected for Quant. or Qual. signal(s).							
4 Aroclor-1016					CAS #: 12674-11-2		
Peaks not detected for Quant. or Qual. signal(s).							
3 Aroclor-1232					CAS #: 11141-16-5		
Operator disabled compound identification.							
6 Aroclor-1248					CAS #: 12672-29-6		
Operator disabled compound identification.							
5 Aroclor-1242					CAS #: 53469-21-9		
7.717	7.745	-0.028	32645	0.07296	0.072956	0.00- 0.00	0.00(aM)
8.399	8.413	-0.014	51731	0.10748	0.10748	330.13- 330.13	0.00
9.154	9.154	0.000	0	0.00000	0.00000	769.70- 769.70	0.00
9.535	9.535	0.000	0	0.00000	0.00000	532.48- 532.48	0.00
10.064	10.179	-0.115	51766	0.12226	0.12226	334.30- 334.30	0.00
Average of Peak Concentrations = 0.10090							

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030722.D
Report Date: 21-Oct-2013 16:00

				CONCENTRATIONS ON-COL (ng)	FINAL (ug/L)	TARGET RANGE	RATIO
RT	EXP RT	DLT RT	RESPONSE				
7 Aroclor-1254					CAS #: 11097-69-1		

Operator disabled compound identification.

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9 Aroclor-1262					CAS #: 37324-23-5		

Operator disabled compound identification.

---

8 Aroclor-1260					CAS #: 11096-82-5		

Operator disabled compound identification.

---

10 Aroclor-1268					CAS #: 11100-14-4		

Operator disabled compound identification.

$ 11 DCB Decachlorobiphenyl (Surr)					CAS #: 2051-24-3		
18.233	18.237	-0.004	419579	0.01905	0.019051		(R)

QC Flag Legend

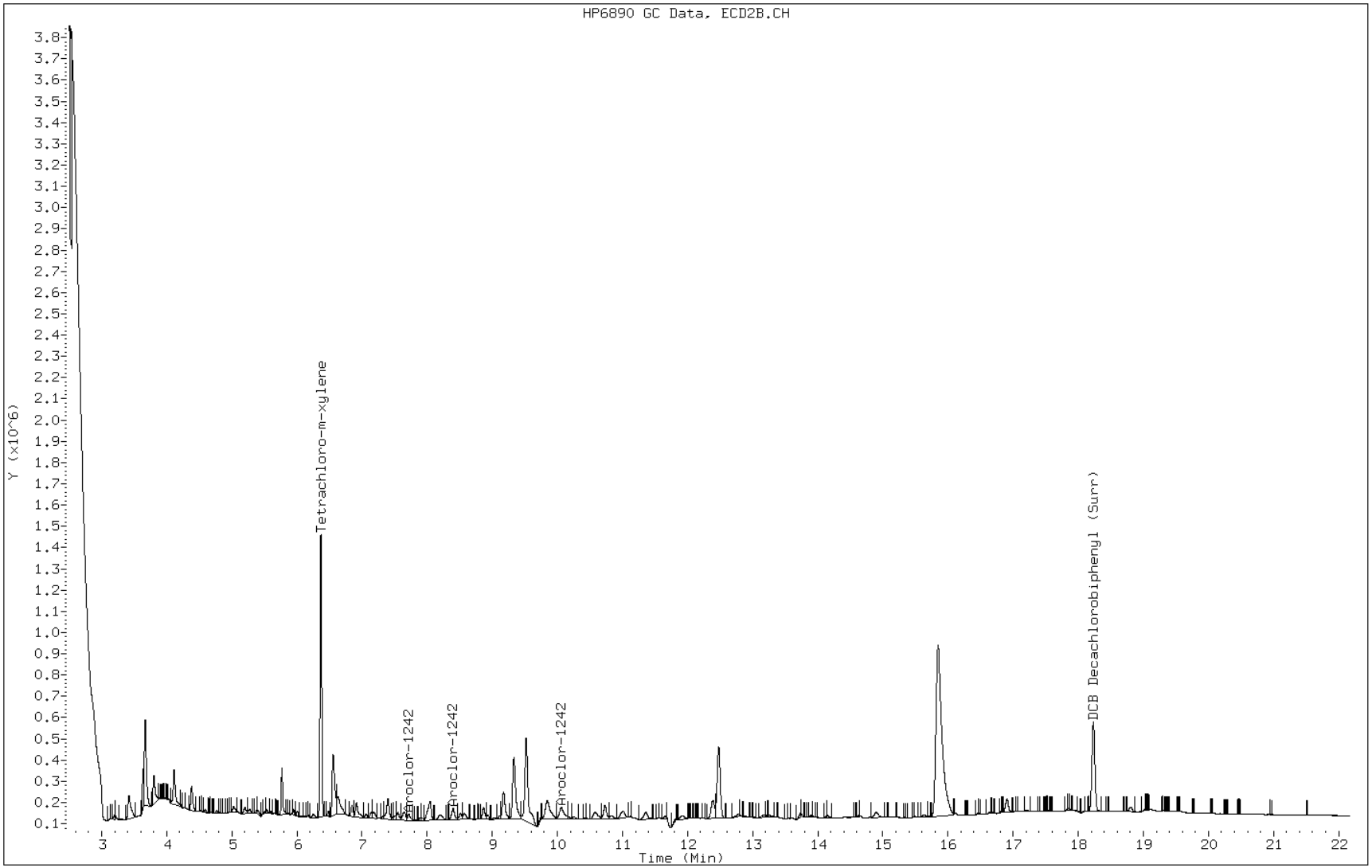
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: P1030722.D

Date: 21-OCT-2013 10:54

Client ID: MB-MW-04-20131009 Instrument: gc8.i

Sample Info: 10183B8082ALL.b Operator: 402360



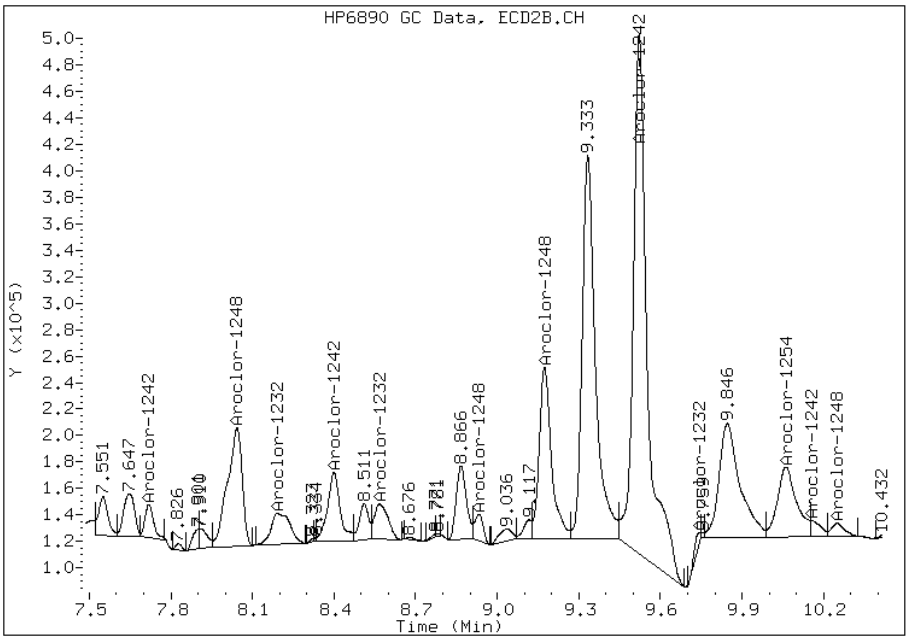
Manual Integration Report

Data File: P1030722.D
Inj. Date and Time: 21-OCT-2013 10:54
Instrument ID: gc8.i
Client ID: MB-MW-04-20131009
Compound: 5 Aroclor-1242
CAS #: 53469-21-9
Report Date: 10/21/2013

Processing Integration Results

RT	Response	Conc
7.72	24827*	0.06
8.40	51731	0.11
9.17	129320*	0.23
9.52	392570*	1.70
10.16	12084*	0.03

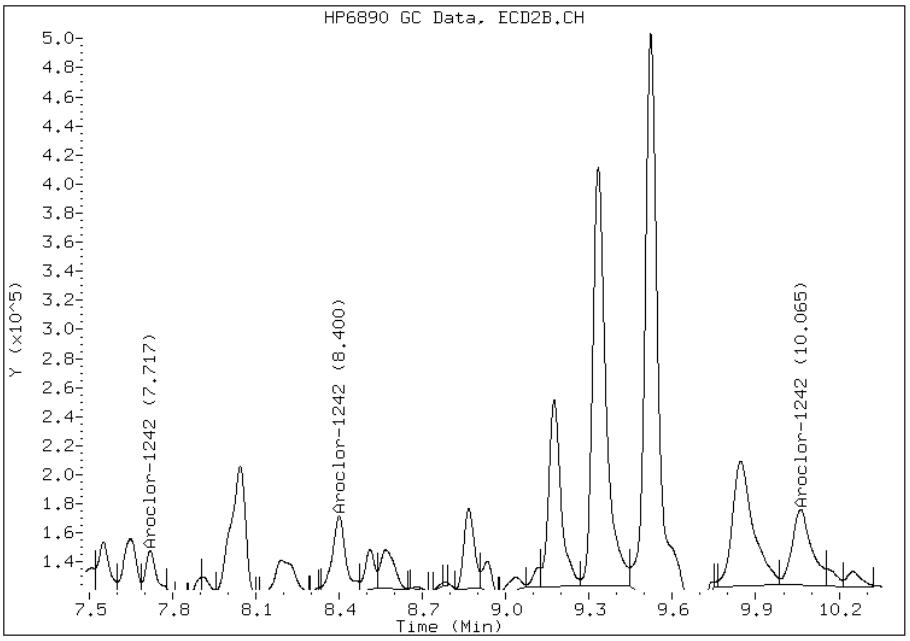
Final Conc		0.43



Manual Integration Results

RT	Response	Conc
7.72	32645*	0.07
8.40	51731	0.11
9.15	0*	0.00
9.54	0*	0.00
10.06	51766*	0.12

Final Conc		0.10



Manually Integrated By: guptaa
Modification Date: 21-Oct-2013 12:32
Manual Integration Reason: Poor Chromatography

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-06-20131010 Lab Sample ID: 180-26012-6

Matrix: Water Lab File ID: P1030723.D

Analysis Method: 8082A Date Collected: 10/10/2013 08:10

Extraction Method: 3510C Date Extracted: 10/15/2013 14:50

Sample wt/vol: 1060(mL) Date Analyzed: 10/21/2013 11:23

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-1701 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 87359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	ND		0.0094	0.0024
11104-28-2	PCB-1221	ND		0.0094	0.0023
11141-16-5	PCB-1232	ND		0.0094	0.0028
53469-21-9	PCB-1242	0.015		0.0094	0.0018
12672-29-6	PCB-1248	ND		0.0094	0.0021
11097-69-1	PCB-1254	ND		0.0094	0.0022
11096-82-5	PCB-1260	ND		0.0094	0.0013
37324-23-5	PCB-1262	ND		0.0094	0.0019
11100-14-4	PCB-1268	ND		0.0094	0.0026

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	47	X	50-140
877-09-8	Tetrachloro-m-xylene	72		47-150

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030723.D
Report Date: 21-Oct-2013 12:32

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030723.D
Lab Smp Id: 180-26012-D-6-C Client Smp ID: MB-MW-06-20131010
Inj Date : 21-OCT-2013 11:23
Operator : 402360 Inst ID: gc8.i
Smp Info : 10183B8082ALL.b
Misc Info : 180-26012-D-6-C
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\PCBBALL.m
Meth Date : 21-Oct-2013 12:26 guptaa Quant Type: ESTD
Cal Date : 15-OCT-2013 03:14 Cal File: P1030424.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO	
$ 2 Tetrachloro-m-xylene					CAS #: 877-09-8			
6.371	6.369	0.002	673102	0.01449	0.014490			(R)
1 Aroclor-1221					CAS #: 11104-28-2			
Peaks not detected for Quant. or Qual. signal(s).								
4 Aroclor-1016					CAS #: 12674-11-2			
Peaks not detected for Quant. or Qual. signal(s).								
3 Aroclor-1232					CAS #: 11141-16-5			
Operator disabled compound identification.								
6 Aroclor-1248					CAS #: 12672-29-6			
Operator disabled compound identification.								
5 Aroclor-1242					CAS #: 53469-21-9			
7.721	7.745	-0.024	11394	0.02546	0.025464	0.00- 0.00	0.00	(aM)
8.413	8.413	0.000	0	0.00000	0.00000	330.13- 330.13	0.00	
9.123	9.154	-0.031	7007	0.01271	0.012713	769.70- 769.70	0.00	
9.535	9.535	0.000	0	0.00000	0.00000	532.48- 532.48	0.00	
10.156	10.179	-0.023	4245	0.01003	0.010026	334.30- 334.30	0.00	
Average of Peak Concentrations = 0.016067								

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030723.D
Report Date: 21-Oct-2013 12:32

				CONCENTRATIONS ON-COL (ng)	FINAL (ug/L)	TARGET RANGE	RATIO
RT	EXP RT	DLT RT	RESPONSE				
7 Aroclor-1254					CAS #: 11097-69-1		

Peaks not detected for Quant. or Qual. signal(s).

---

9 Aroclor-1262					CAS #: 37324-23-5		

Peaks not detected for Quant. or Qual. signal(s).

---

8 Aroclor-1260					CAS #: 11096-82-5		

Operator disabled compound identification.

---

10 Aroclor-1268					CAS #: 11100-14-4		

Peaks not detected for Quant. or Qual. signal(s).

$ 11 DCB Decachlorobiphenyl (Surr)					CAS #: 2051-24-3		
18.236	18.227	0.009	207013	0.00940	0.0093993		(R)

QC Flag Legend

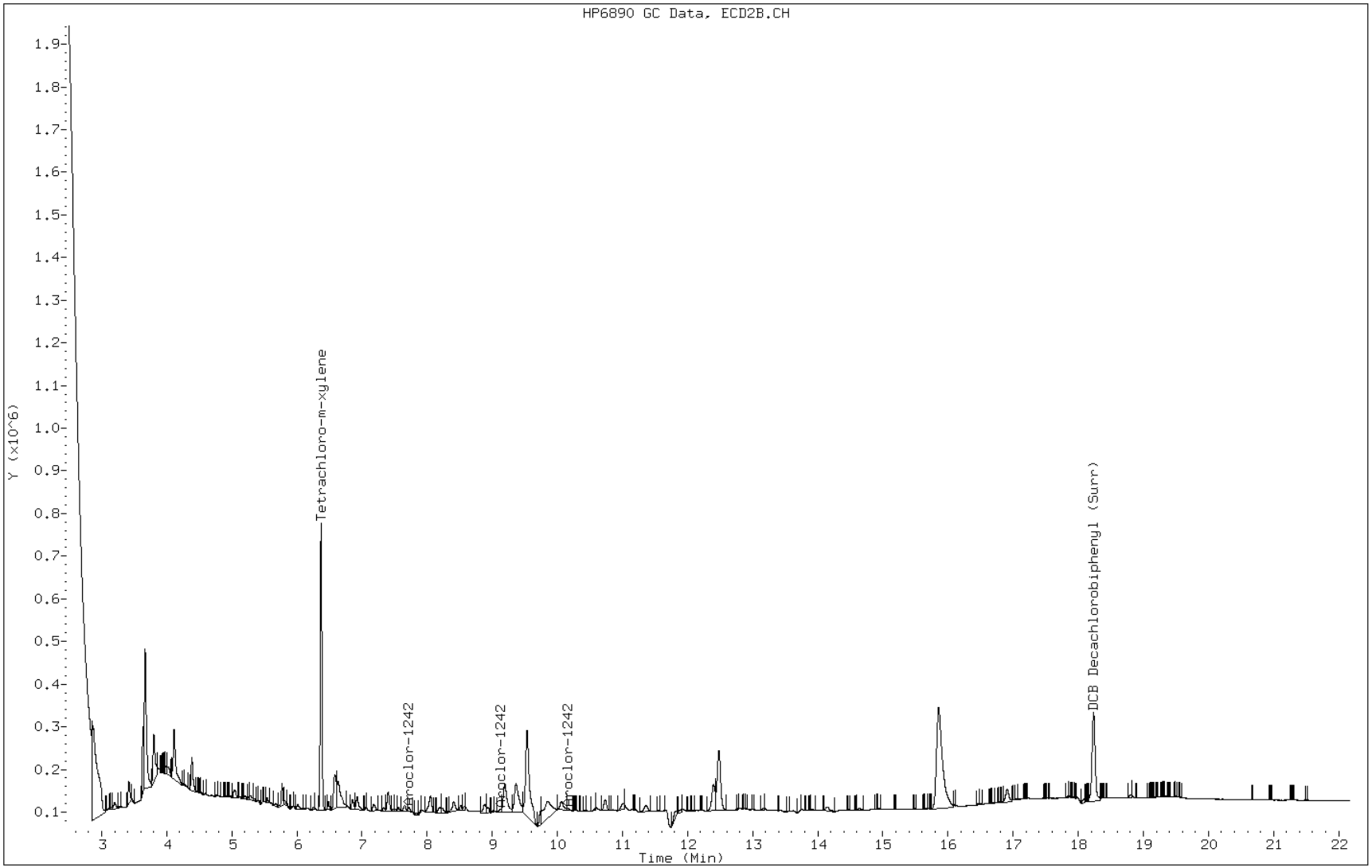
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: P1030723.D

Date: 21-OCT-2013 11:23

Client ID: MB-MW-06-20131010 Instrument: gc8.i

Sample Info: 10183B8082ALL.b Operator: 402360



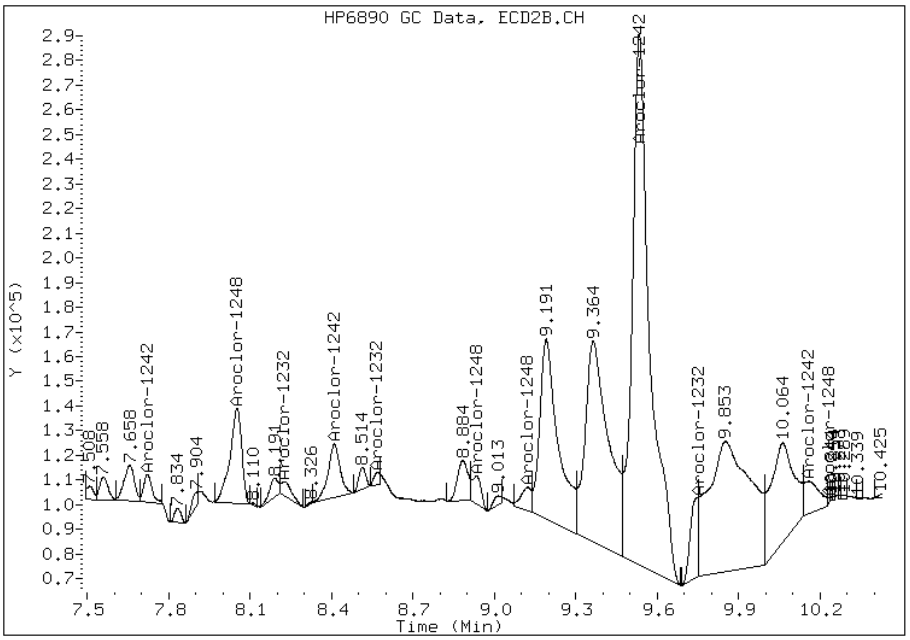
Manual Integration Report

Data File: P1030723.D
Inj. Date and Time: 21-OCT-2013 11:23
Instrument ID: gc8.i
Client ID: MB-MW-06-20131010
Compound: 5 Aroclor-1242
CAS #: 53469-21-9
Report Date: 10/21/2013

Processing Integration Results

RT	Response	Conc
7.72	11394	0.03
8.41	21527*	0.04
9.12	9588*	0.02
9.53	215486*	0.93
10.16	13347*	0.03

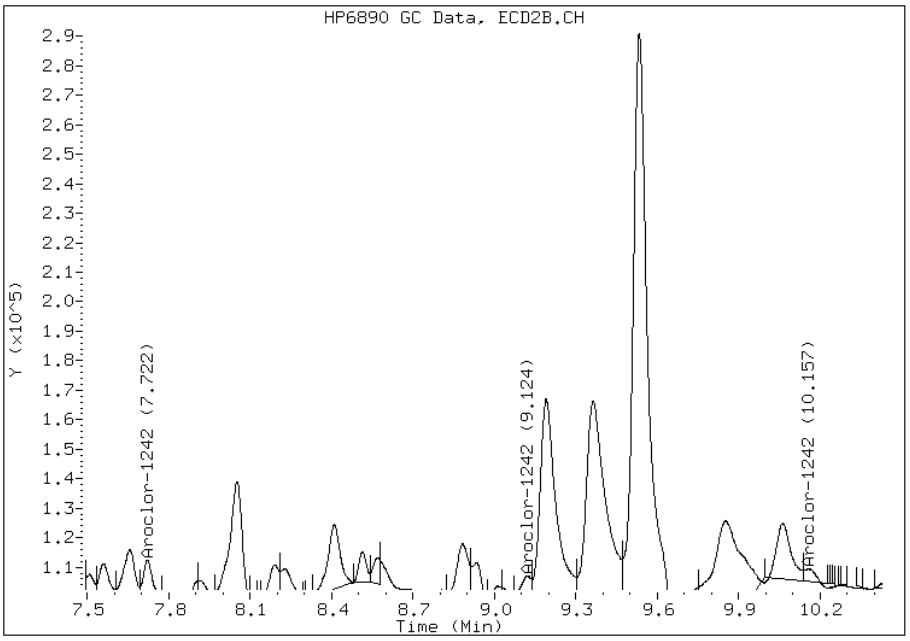
Final Conc		0.21



Manual Integration Results

RT	Response	Conc
7.72	11394	0.03
8.41	0*	0.00
9.12	7007*	0.01
9.54	0*	0.00
10.16	4245*	0.01

Final Conc		0.02



Manually Integrated By: guptaa
Modification Date: 21-Oct-2013 12:29
Manual Integration Reason: Poor Chromatography

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Client Sample ID: DUP-20131009 Lab Sample ID: 180-26012-7

Matrix: Water Lab File ID: P1030665.D

Analysis Method: 8082A Date Collected: 10/09/2013 00:00

Extraction Method: 3510C Date Extracted: 10/15/2013 14:50

Sample wt/vol: 1040(mL) Date Analyzed: 10/20/2013 03:19

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-1701 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 87359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	ND		0.0096	0.0024
11104-28-2	PCB-1221	ND		0.0096	0.0024
11141-16-5	PCB-1232	ND		0.0096	0.0028
53469-21-9	PCB-1242	ND		0.0096	0.0018
12672-29-6	PCB-1248	ND		0.0096	0.0022
11097-69-1	PCB-1254	ND		0.0096	0.0022
11096-82-5	PCB-1260	ND		0.0096	0.0013
37324-23-5	PCB-1262	ND		0.0096	0.0020
11100-14-4	PCB-1268	ND		0.0096	0.0026

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	85		50-140
877-09-8	Tetrachloro-m-xylene	133		47-150

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030665.D
Report Date: 21-Oct-2013 08:00

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030665.D
Lab Smp Id: 180-26012-C-7-C Client Smp ID: DUP-20131009
Inj Date : 20-OCT-2013 03:19
Operator : 402360 Inst ID: gc8.i
Smp Info : 10193B8082ALL.b
Misc Info : 180-26012-C-7-C
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\PCBBALL.m
Meth Date : 21-Oct-2013 07:53 guptaa Quant Type: ESTD
Cal Date : 15-OCT-2013 03:14 Cal File: P1030424.D
Als bottle: 42
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO	
$ 2 Tetrachloro-m-xylene					CAS #: 877-09-8			
6.369	6.389	-0.020	1235527	0.02660	0.026598			(R)

---

1 Aroclor-1221 CAS #: 11104-28-2

Operator disabled compound identification.

---

4 Aroclor-1016 CAS #: 12674-11-2

Operator disabled compound identification.

---

3 Aroclor-1232 CAS #: 11141-16-5

Operator disabled compound identification.

---

6 Aroclor-1248 CAS #: 12672-29-6

Peaks not detected for Quant. or Qual. signal(s).

---

5 Aroclor-1242 CAS #: 53469-21-9

Peaks not detected for Quant. or Qual. signal(s).

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030665.D
Report Date: 21-Oct-2013 08:00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
7 Aroclor-1254					CAS #: 11097-69-1		
Peaks not detected for Quant. or Qual. signal(s).							
9 Aroclor-1262					CAS #: 37324-23-5		
Peaks not detected for Quant. or Qual. signal(s).							
8 Aroclor-1260					CAS #: 11096-82-5		
Operator disabled compound identification.							
10 Aroclor-1268					CAS #: 11100-14-4		
Peaks not detected for Quant. or Qual. signal(s).							
$ 11 DCB Decachlorobiphenyl (Surr)					CAS #: 2051-24-3		
18.234	18.246	-0.012	377102	0.01712	0.017122		(R)

QC Flag Legend

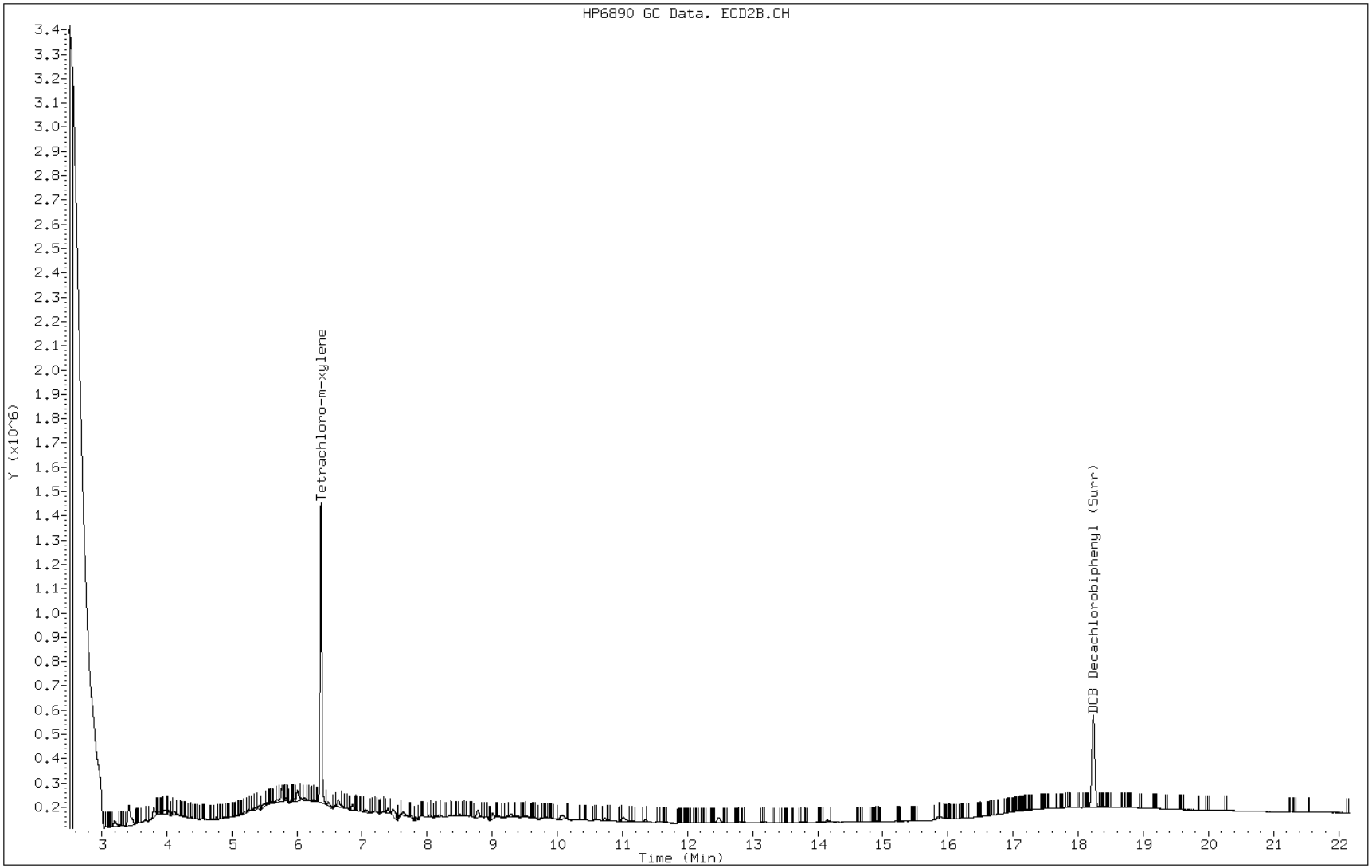
R - Spike/Surrogate failed recovery limits.

Data File: P1030665.D

Date: 20-OCT-2013 03:19

Client ID: DUP-20131009 Instrument: gc8.i

Sample Info: 10193B8082ALL.b Operator: 402360



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-05-20131010 Lab Sample ID: 180-26012-8

Matrix: Water Lab File ID: P1030666.D

Analysis Method: 8082A Date Collected: 10/10/2013 09:55

Extraction Method: 3510C Date Extracted: 10/15/2013 14:50

Sample wt/vol: 1050(mL) Date Analyzed: 10/20/2013 03:48

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-1701 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 87359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	ND		0.0095	0.0024
11104-28-2	PCB-1221	ND		0.0095	0.0024
11141-16-5	PCB-1232	ND		0.0095	0.0028
53469-21-9	PCB-1242	ND		0.0095	0.0018
12672-29-6	PCB-1248	ND		0.0095	0.0022
11097-69-1	PCB-1254	ND		0.0095	0.0022
11096-82-5	PCB-1260	ND		0.0095	0.0013
37324-23-5	PCB-1262	ND		0.0095	0.0020
11100-14-4	PCB-1268	ND		0.0095	0.0026

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	90		50-140
877-09-8	Tetrachloro-m-xylene	153	X	47-150

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030666.D
Report Date: 21-Oct-2013 08:00

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030666.D
Lab Smp Id: 180-26012-A-8-C Client Smp ID: MB-MW-05-20131010
Inj Date : 20-OCT-2013 03:48
Operator : 402360 Inst ID: gc8.i
Smp Info : 10183B8082ALL.b
Misc Info : 180-26012-A-8-C
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\PCBBALL.m
Meth Date : 21-Oct-2013 07:53 guptaa Quant Type: ESTD
Cal Date : 15-OCT-2013 03:14 Cal File: P1030424.D
Als bottle: 43
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 2 Tetrachloro-m-xylene					CAS #: 877-09-8		
6.363	6.389	-0.026	1425205	0.03068	0.030682		(R)
1 Aroclor-1221					CAS #: 11104-28-2		
Operator disabled compound identification.							
4 Aroclor-1016					CAS #: 12674-11-2		
Peaks not detected for Quant. or Qual. signal(s).							
3 Aroclor-1232					CAS #: 11141-16-5		
Operator disabled compound identification.							
6 Aroclor-1248					CAS #: 12672-29-6		
Peaks not detected for Quant. or Qual. signal(s).							
5 Aroclor-1242					CAS #: 53469-21-9		
Peaks not detected for Quant. or Qual. signal(s).							

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030666.D
Report Date: 21-Oct-2013 08:00

				CONCENTRATIONS ON-COL (ng)	FINAL (ug/L)	TARGET RANGE	RATIO
RT	EXP RT	DLT RT	RESPONSE				
7 Aroclor-1254					CAS #: 11097-69-1		

Peaks not detected for Quant. or Qual. signal(s).

---

9 Aroclor-1262					CAS #: 37324-23-5		

Peaks not detected for Quant. or Qual. signal(s).

---

8 Aroclor-1260					CAS #: 11096-82-5		

Operator disabled compound identification.

---

10 Aroclor-1268					CAS #: 11100-14-4		

Operator disabled compound identification.

$ 11 DCB Decachlorobiphenyl (Surr)					CAS #: 2051-24-3		
18.233	18.246	-0.013	399836	0.01815	0.018154		(R)

QC Flag Legend

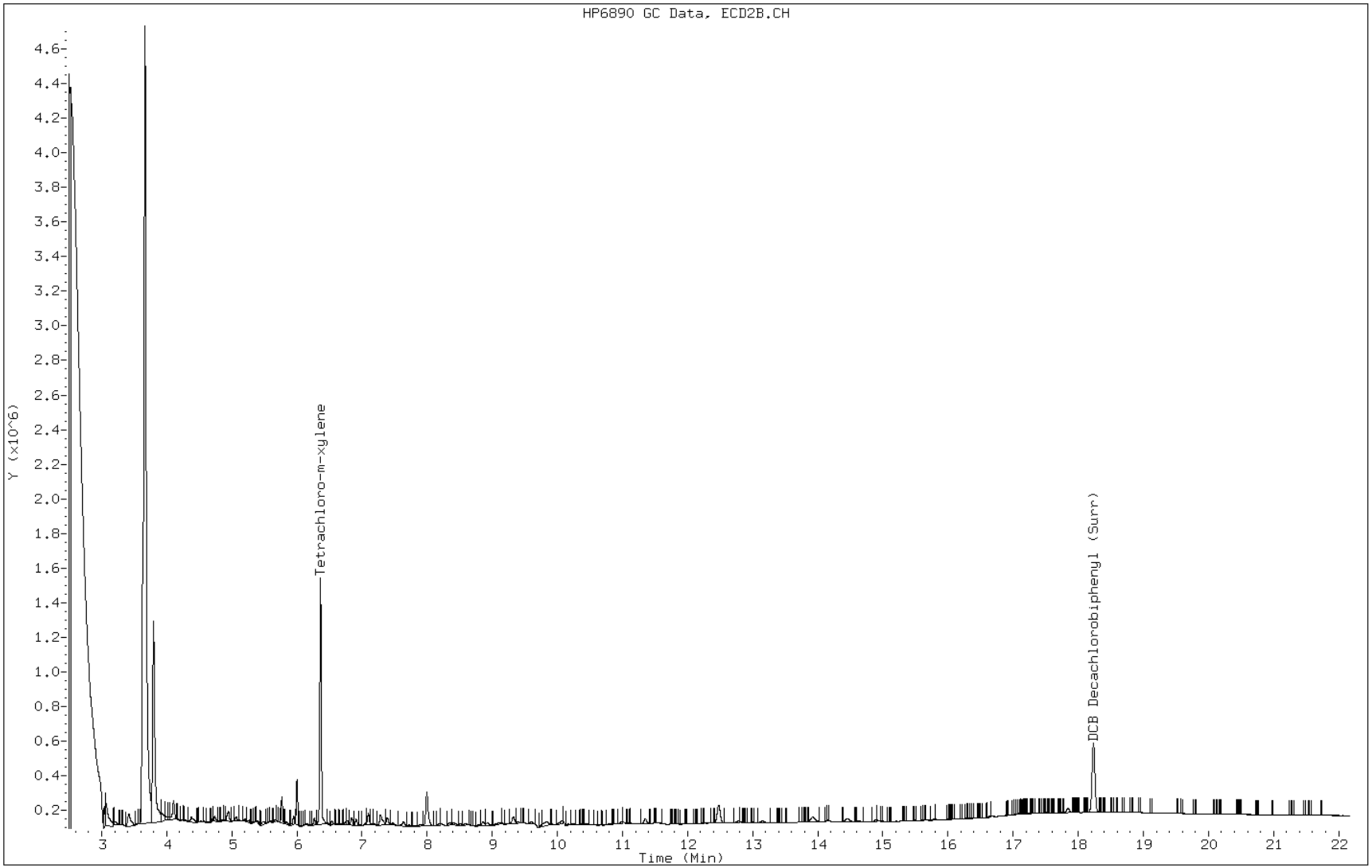
R - Spike/Surrogate failed recovery limits.

Data File: P1030666.D

Date: 20-OCT-2013 03:48

Client ID: MB-MW-05-20131010 Instrument: gc8.i

Sample Info: 10183B8082ALL.b Operator: 402360



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-EB-20131010 Lab Sample ID: 180-26012-9

Matrix: Water Lab File ID: P1030667.D

Analysis Method: 8082A Date Collected: 10/10/2013 09:00

Extraction Method: 3510C Date Extracted: 10/15/2013 14:50

Sample wt/vol: 1060(mL) Date Analyzed: 10/20/2013 04:17

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-1701 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 87359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	ND		0.0094	0.0024
11104-28-2	PCB-1221	ND		0.0094	0.0023
11141-16-5	PCB-1232	ND		0.0094	0.0028
53469-21-9	PCB-1242	ND		0.0094	0.0018
12672-29-6	PCB-1248	ND		0.0094	0.0021
11097-69-1	PCB-1254	ND		0.0094	0.0022
11096-82-5	PCB-1260	ND		0.0094	0.0013
37324-23-5	PCB-1262	ND		0.0094	0.0019
11100-14-4	PCB-1268	ND		0.0094	0.0026

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	86		50-140
877-09-8	Tetrachloro-m-xylene	124		47-150

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030667.D
Report Date: 21-Oct-2013 08:00

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030667.D
Lab Smp Id: 180-26012-D-9-C Client Smp ID: MB-EB-20131010
Inj Date : 20-OCT-2013 04:17
Operator : 402360 Inst ID: gc8.i
Smp Info : 10183B8082ALL.b
Misc Info : 180-26012-D-9-C
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\PCBBALL.m
Meth Date : 21-Oct-2013 07:53 guptaa Quant Type: ESTD
Cal Date : 15-OCT-2013 03:14 Cal File: P1030424.D
Als bottle: 44
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL (ng)	FINAL (ug/L)	TARGET RANGE	RATIO	
RT	EXP RT	DLT RT	RESPONSE					
$ 2 Tetrachloro-m-xylene						CAS #: 877-09-8		
6.371	6.389	-0.018	1154790	0.02486	0.024860			(R)

---

1 Aroclor-1221 CAS #: 11104-28-2

Operator disabled compound identification.

---

4 Aroclor-1016 CAS #: 12674-11-2

Peaks not detected for Quant. or Qual. signal(s).

---

3 Aroclor-1232 CAS #: 11141-16-5

Operator disabled compound identification.

---

6 Aroclor-1248 CAS #: 12672-29-6

Operator disabled compound identification.

---

5 Aroclor-1242 CAS #: 53469-21-9

Operator disabled compound identification.

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030667.D
Report Date: 21-Oct-2013 08:00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO

7 Aroclor-1254 CAS #: 11097-69-1

Operator disabled compound identification.

---

9 Aroclor-1262 CAS #: 37324-23-5

Peaks not detected for Quant. or Qual. signal(s).

---

8 Aroclor-1260 CAS #: 11096-82-5

Peaks not detected for Quant. or Qual. signal(s).

---

10 Aroclor-1268 CAS #: 11100-14-4

Peaks not detected for Quant. or Qual. signal(s).

$ 11 DCB Decachlorobiphenyl (Surr) CAS #: 2051-24-3

18.233	18.246	-0.013	379235	0.01722	0.017219		(R)

QC Flag Legend

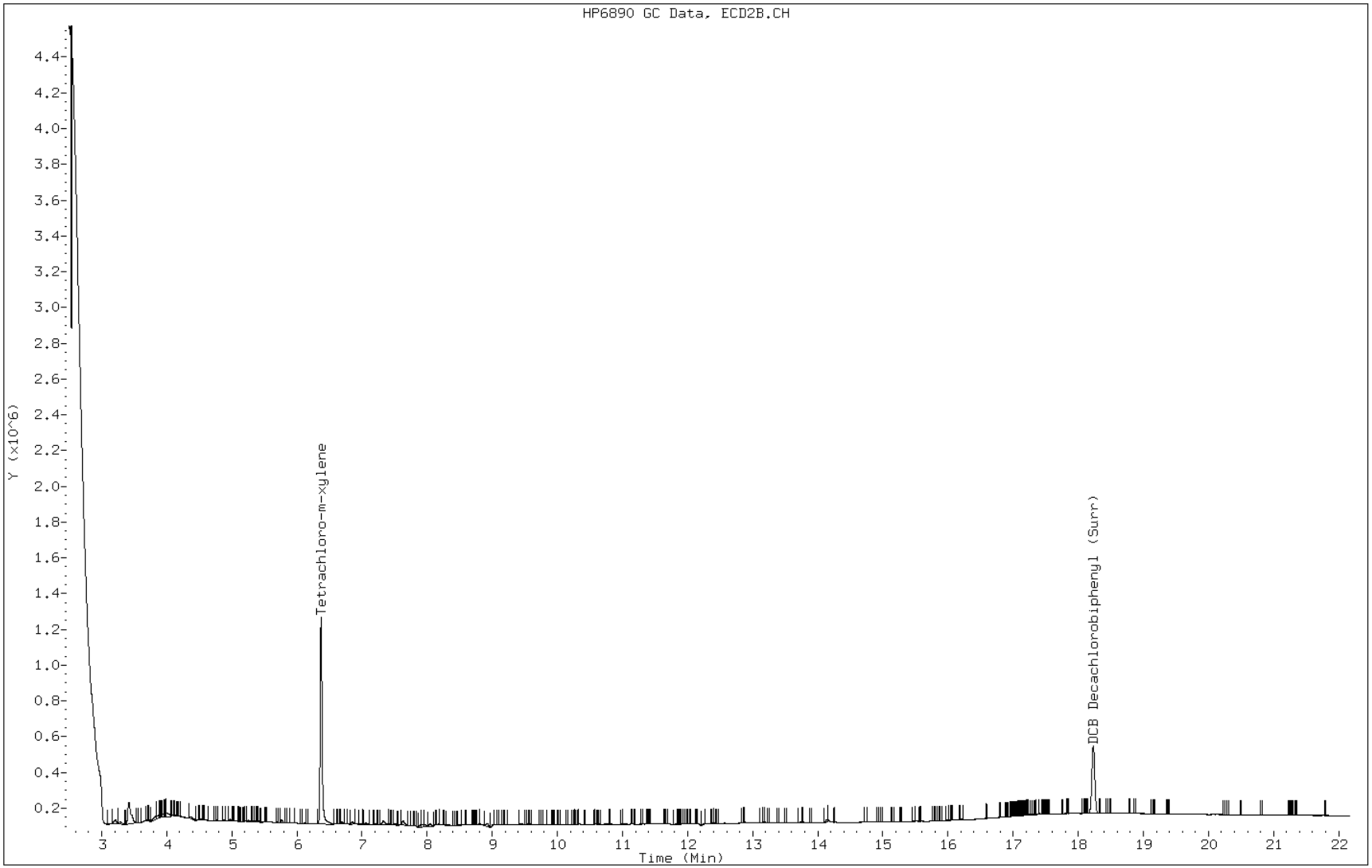
R - Spike/Surrogate failed recovery limits.

Data File: P1030667.D

Date: 20-OCT-2013 04:17

Client ID: MB-EB-20131010 Instrument: gc8.i

Sample Info: 10183B8082ALL.b Operator: 402360



FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 15:33 Calibration End Date: 10/14/2013 17:30 Calibration ID: 11835

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/1	P1030400.D
Level 2	IC 180-86759/2	P1030401.D
Level 3	IC 180-86759/3	P1030402.D
Level 4	IC 180-86759/4	P1030403.D
Level 5	IC 180-86759/5	P1030404.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
PCB-1221 Peak 1	5.892	5.889	5.882	5.879	5.876						5.820 - 5.920	5.883
PCB-1221 Peak 2	6.745	6.738	6.728	6.721	6.717						6.661 - 6.761	6.730
PCB-1221 Peak 3	7.004	6.982	6.970	6.964	6.958						6.902 - 7.002	6.975
PCB-1254 Peak 1	9.708	9.708	9.704	9.703	9.700						9.650 - 9.750	9.704
PCB-1254 Peak 2	10.075	10.074	10.069	10.066	10.063						10.013 - 10.113	10.069
PCB-1254 Peak 3	10.633	10.630	10.625	10.624	10.619						10.569 - 10.669	10.626
PCB-1254 Peak 4	11.414	11.414	11.411	11.410	11.408						11.358 - 11.458	11.411
PCB-1254 Peak 5	11.971	11.967	11.964	11.960	11.955						11.905 - 12.005	11.964

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 15:33 Calibration End Date: 10/14/2013 17:30 Calibration ID: 11835

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/1	P1030400.D
Level 2	IC 180-86759/2	P1030401.D
Level 3	IC 180-86759/3	P1030402.D
Level 4	IC 180-86759/4	P1030403.D
Level 5	IC 180-86759/5	P1030404.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
PCB-1221 Peak 1	168000 250791	211120	224940	247080	Ave		220386.200				15.2		20.0			
PCB-1221 Peak 2	337600 321570	239850	264156	297106	Ave		292056.400				13.8		20.0			
PCB-1221 Peak 3	371200 654285	524400	567760	619706	Ave		547470.200				20.1	*	20.0			
PCB-1254 Peak 1	1321300 1344359	1385090	1375736	1349914	Ave		1355279.80				1.9		20.0			
PCB-1254 Peak 2	1180900 1240457	1227610	1202884	1211186	Ave		1212607.40				1.9		20.0			
PCB-1254 Peak 3	418700 442640	452530	429868	436810	Ave		436109.600				2.9		20.0			
PCB-1254 Peak 4	801500 694163	775760	703440	713150	Ave		737602.600				6.5		20.0			
PCB-1254 Peak 5	720900 654041	680790	627736	662118	Ave		669117.000				5.2		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 15:33 Calibration End Date: 10/14/2013 17:30 Calibration ID: 11835

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/1	P1030400.D
Level 2	IC 180-86759/2	P1030401.D
Level 3	IC 180-86759/3	P1030402.D
Level 4	IC 180-86759/4	P1030403.D
Level 5	IC 180-86759/5	P1030404.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1221 Peak 1	Ave	1680	21112	56235	123540	250791	0.0100	0.100	0.250	0.500	1.00
PCB-1221 Peak 2	Ave	3376	23985	66039	148553	321570	0.0100	0.100	0.250	0.500	1.00
PCB-1221 Peak 3	Ave	3712	52440	141940	309853	654285	0.0100	0.100	0.250	0.500	1.00
PCB-1254 Peak 1	Ave	13213	138509	343934	674957	1344359	0.0100	0.100	0.250	0.500	1.00
PCB-1254 Peak 2	Ave	11809	122761	300721	605593	1240457	0.0100	0.100	0.250	0.500	1.00
PCB-1254 Peak 3	Ave	4187	45253	107467	218405	442640	0.0100	0.100	0.250	0.500	1.00
PCB-1254 Peak 4	Ave	8015	77576	175860	356575	694163	0.0100	0.100	0.250	0.500	1.00
PCB-1254 Peak 5	Ave	7209	68079	156934	331059	654041	0.0100	0.100	0.250	0.500	1.00

Curve Type Legend:
Ave = Average by Height

Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030400.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030400.D
Lab Smp Id: IC 876004
Inj Date : 14-OCT-2013 15:33
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : IC 876004
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 03:14 Cal File: P1030424.D
Als bottle: 99 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 2154.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
1 Aroclor-1221					CAS #: 11104-28-2		
5.892	5.870	0.022	1680	0.01000	0.0076230	0.00- 0.00	0.00(aM)
6.745	6.711	0.034	3376	0.01000	0.011559	136.57- 136.57	0.00
7.003	6.952	0.051	3712	0.01000	0.0067803	86.04- 86.04	0.00
		Average of Peak Amounts =			0.00865		
7 Aroclor-1254					CAS #: 11097-69-1		
9.707	9.700	0.007	13213	0.01000	0.0097493	0.00- 0.00	0.00(aM)
10.074	10.063	0.011	11809	0.01000	0.0097385	112.23- 112.23	0.00
10.632	10.619	0.013	4187	0.01000	0.0096008	97.40- 97.40	0.00
11.413	11.408	0.005	8015	0.01000	0.010866	71.09- 71.09	0.00
11.971	11.955	0.016	7209	0.01000	0.010774	85.01- 85.01	0.00
		Average of Peak Amounts =			0.01015		

QC Flag Legend

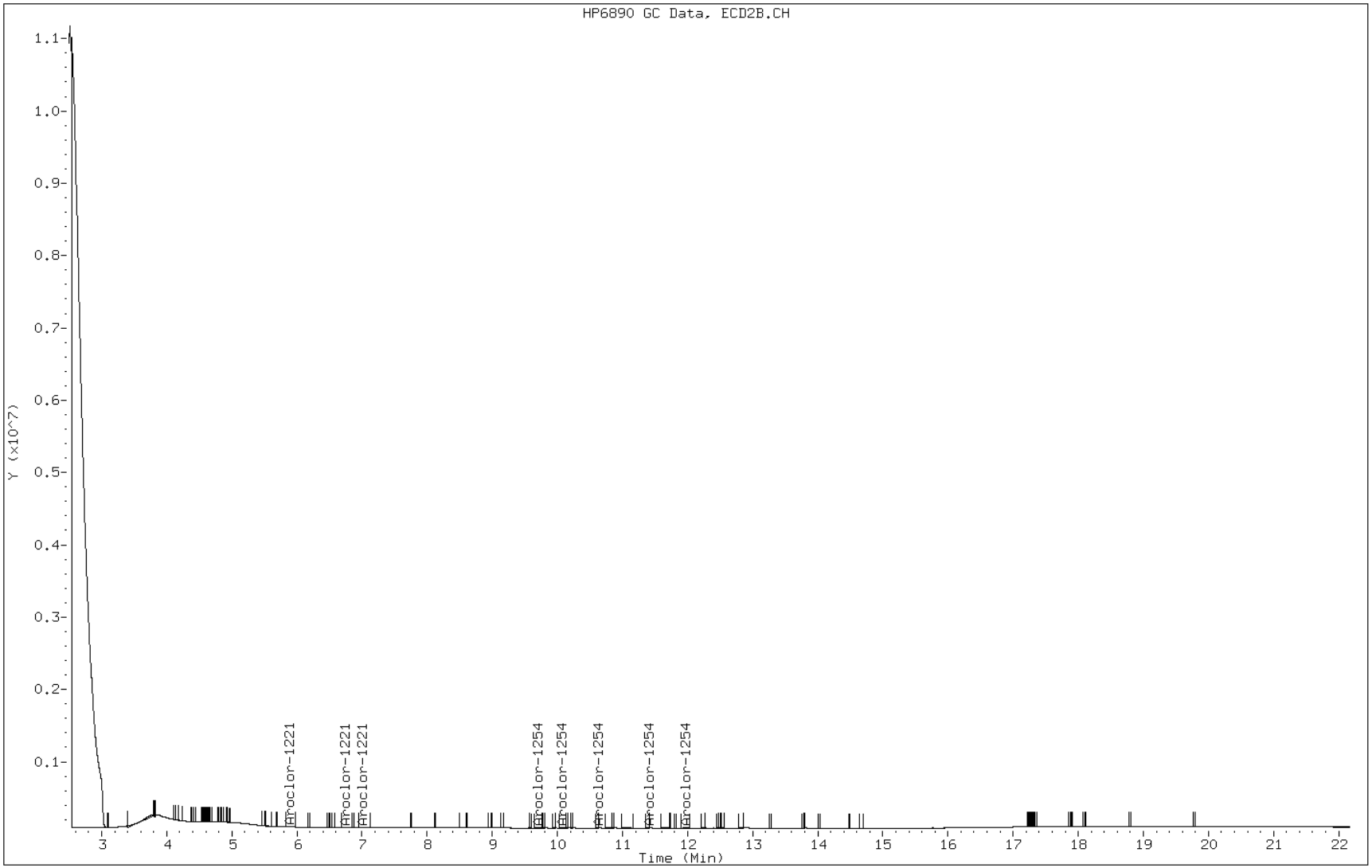
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: P1030400.D

Date: 14-OCT-2013 15:33

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



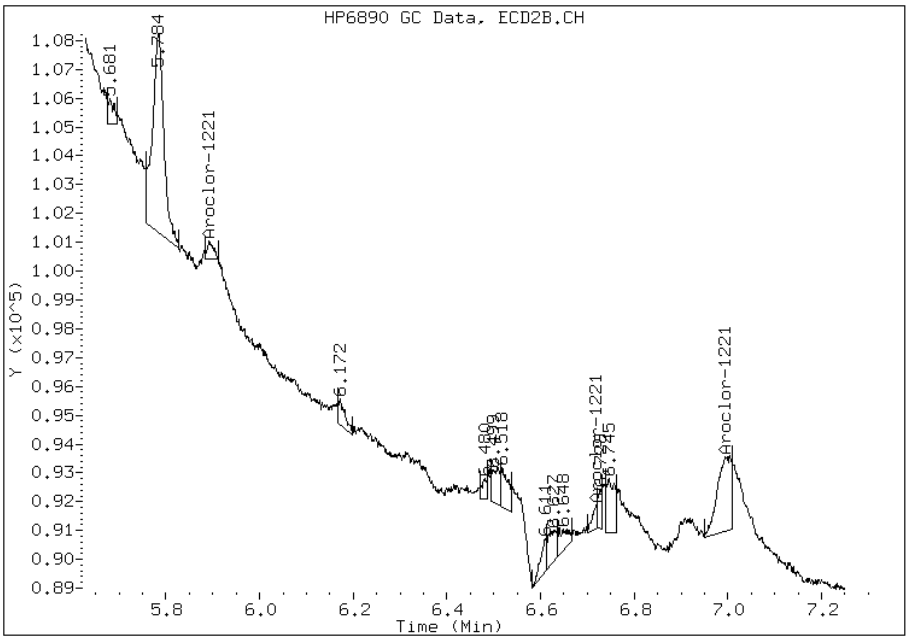
Manual Integration Report

Data File: P1030400.D
Inj. Date and Time: 14-OCT-2013 15:33
Instrument ID: gc8.i
Client ID:
Compound: 1 Aroclor-1221
CAS #: 11104-28-2
Report Date: 10/15/2013

Processing Integration Results

RT	Response	Conc
5.89	656*	0.00
6.72	810*	0.00
6.99	2592*	0.00

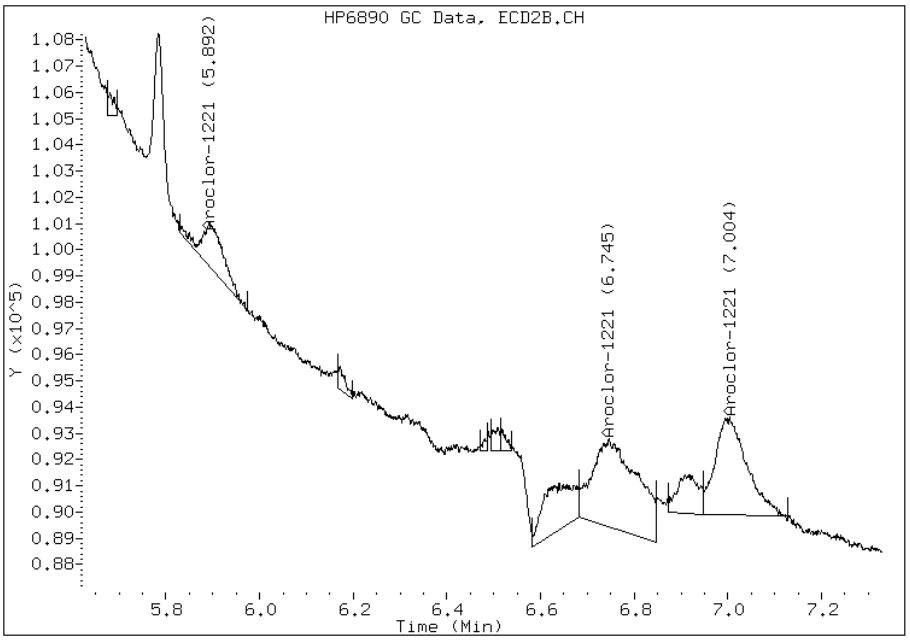
Final Conc		0.00



Manual Integration Results

RT	Response	Conc
5.89	1680*	0.01
6.75	3376*	0.01
7.00	3712*	0.01

Final Conc		0.01



Manually Integrated By: guptaa
Modification Date: 15-Oct-2013 09:19
Manual Integration Reason: Poor Chromatography

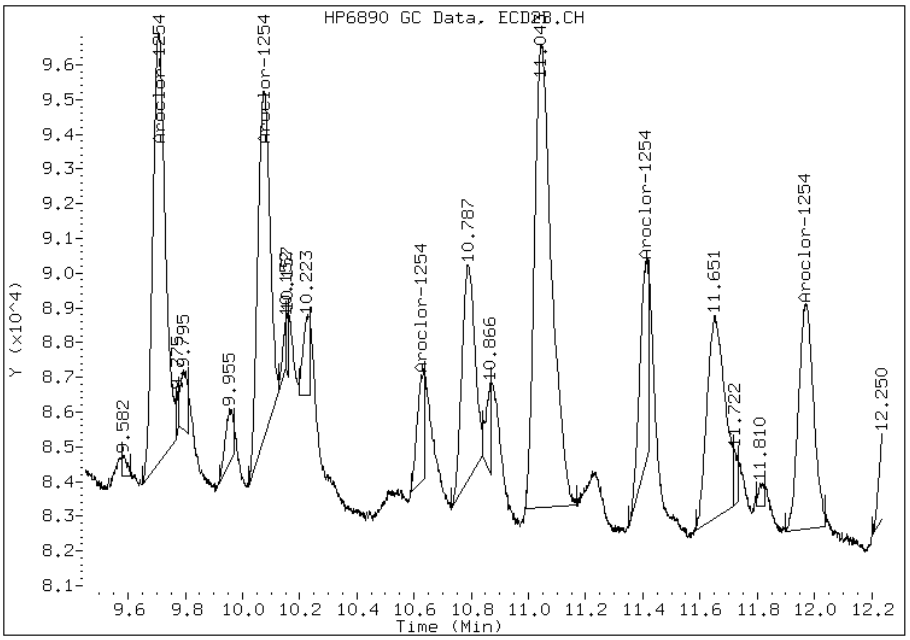
Manual Integration Report

Data File: P1030400.D
Inj. Date and Time: 14-OCT-2013 15:33
Instrument ID: gc8.i
Client ID:
Compound: 7 Aroclor-1254
CAS #: 11097-69-1
Report Date: 10/15/2013

Processing Integration Results

RT	Response	Conc
9.71	12365*	0.01
10.07	10014*	0.01
10.63	3107*	0.01
11.41	5804*	0.01
11.97	6481*	0.01

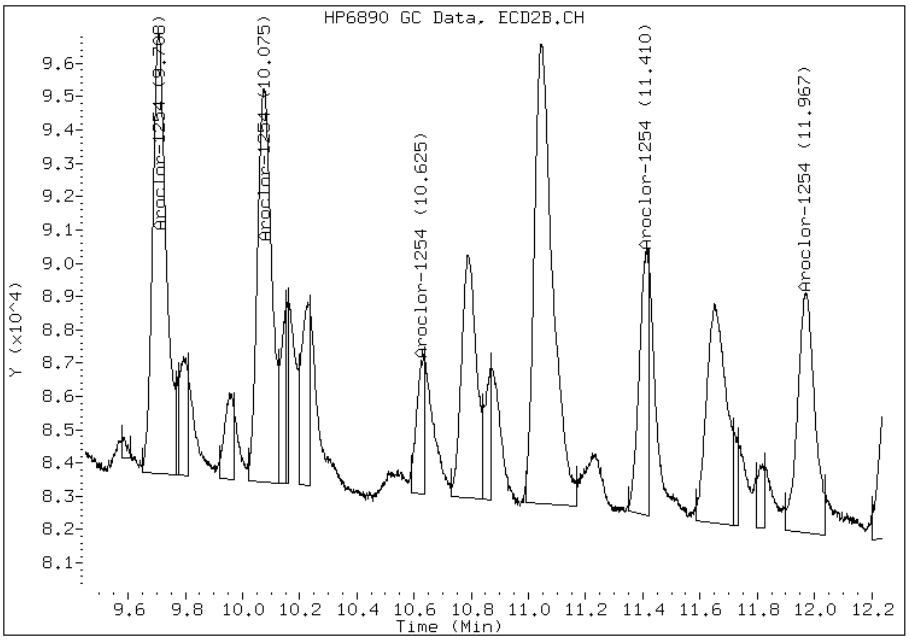
Final Conc		0.01



Manual Integration Results

RT	Response	Conc
9.71	13213*	0.01
10.07	11809*	0.01
10.63	4187*	0.01
11.41	8015*	0.01
11.97	7209*	0.01

Final Conc		0.01



Manually Integrated By: guptaa
Modification Date: 15-Oct-2013 09:01
Manual Integration Reason: Poor Chromatography

Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030401.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030401.D
Lab Smp Id: IC 876005
Inj Date : 14-OCT-2013 16:02
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : IC 876005
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 00:19 Cal File: P1030418.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 2154.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
1 Aroclor-1221					CAS #: 11104-28-2			
5.888	5.870	0.018	21112	0.10000	0.095795	0.00-	0.00	0.00(a)
6.737	6.711	0.026	23985	0.10000	0.082124	136.57-	136.57	0.00
6.982	6.952	0.030	52440	0.10000	0.095786	86.04-	86.04	0.00
	Average of Peak Amounts =				0.09123			
7 Aroclor-1254					CAS #: 11097-69-1			
9.707	9.700	0.007	138509	0.10000	0.10220	0.00-	0.00	0.00(a)
10.073	10.063	0.010	122761	0.10000	0.10124	112.23-	112.23	0.00
10.630	10.619	0.011	45253	0.10000	0.10376	97.40-	97.40	0.00
11.413	11.408	0.005	77576	0.10000	0.10517	71.09-	71.09	0.00
11.967	11.955	0.012	68079	0.10000	0.10174	85.01-	85.01	0.00
	Average of Peak Amounts =				0.10282			

QC Flag Legend

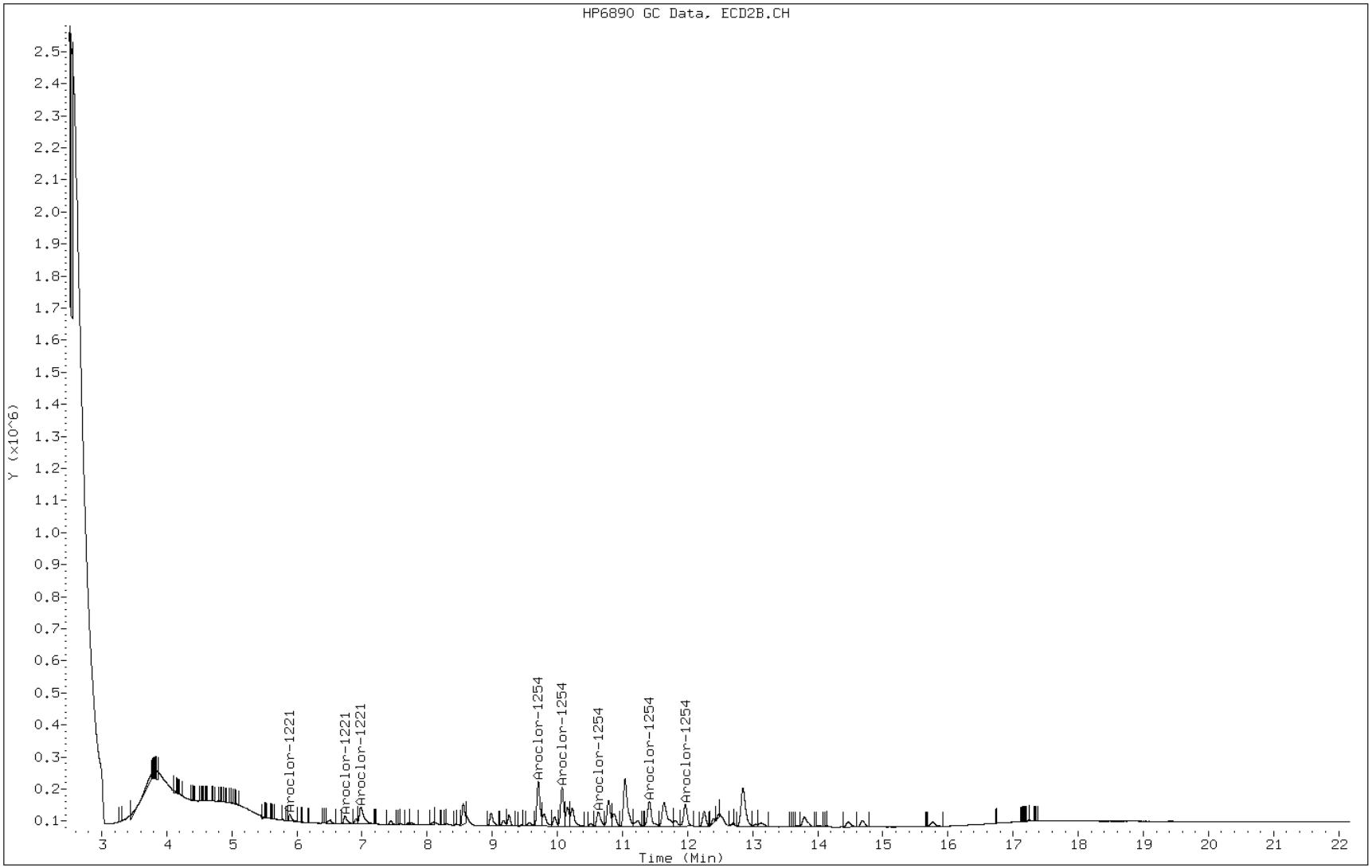
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: P1030401.D

Date: 14-OCT-2013 16:02

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030402.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030402.D
Lab Smp Id: IC 876006
Inj Date : 14-OCT-2013 16:32
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : IC 876006
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 00:48 Cal File: P1030419.D
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 2154.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
1 Aroclor-1221					CAS #: 11104-28-2		
5.882	5.870	0.012	56235	0.25000	0.25516	0.00- 0.00	0.00(a)
6.727	6.711	0.016	66039	0.25000	0.22612	136.57- 136.57	0.00
6.969	6.952	0.017	141940	0.25000	0.25926	86.04- 86.04	0.00
		Average of Peak Amounts =			0.24685		
7 Aroclor-1254					CAS #: 11097-69-1		
9.703	9.700	0.003	343934	0.25000	0.25377	0.00- 0.00	0.00(a)
10.068	10.063	0.005	300721	0.25000	0.24800	112.23- 112.23	0.00
10.625	10.619	0.006	107467	0.25000	0.24642	97.40- 97.40	0.00
11.411	11.408	0.003	175860	0.25000	0.23842	71.09- 71.09	0.00
11.963	11.955	0.008	156934	0.25000	0.23454	85.01- 85.01	0.00
		Average of Peak Amounts =			0.24423		

QC Flag Legend

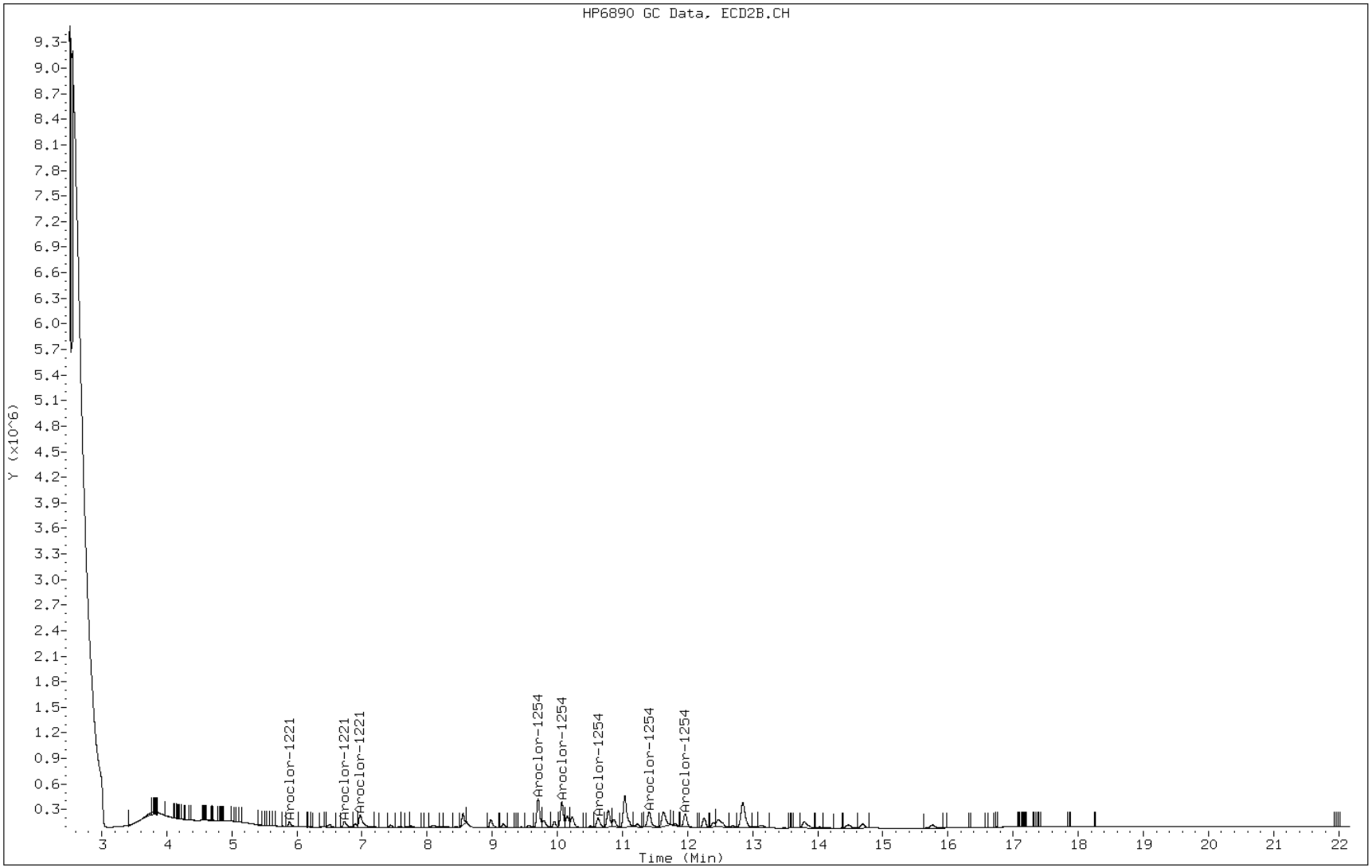
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: P1030402.D

Date: 14-OCT-2013 16:32

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030403.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030403.D
Lab Smp Id: IC 876008
Inj Date : 14-OCT-2013 17:01
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : IC 876008
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 01:17 Cal File: P1030420.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 2154.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
1 Aroclor-1221					CAS #: 11104-28-2		
5.878	5.870	0.008	123540	0.50000	0.56056	0.00- 0.00	0.00(a)
6.721	6.711	0.010	148553	0.50000	0.50864	136.57- 136.57	0.00
6.963	6.952	0.011	309853	0.50000	0.56597	86.04- 86.04	0.00
		Average of Peak Amounts =			0.54506		
7 Aroclor-1254					CAS #: 11097-69-1		
9.702	9.700	0.002	674957	0.50000	0.49802	0.00- 0.00	0.00(a)
10.066	10.063	0.003	605593	0.50000	0.49941	112.23- 112.23	0.00
10.623	10.619	0.004	218405	0.50000	0.50080	97.40- 97.40	0.00
11.409	11.408	0.001	356575	0.50000	0.48342	71.09- 71.09	0.00
11.960	11.955	0.005	331059	0.50000	0.49477	85.01- 85.01	0.00
		Average of Peak Amounts =			0.49528		

QC Flag Legend

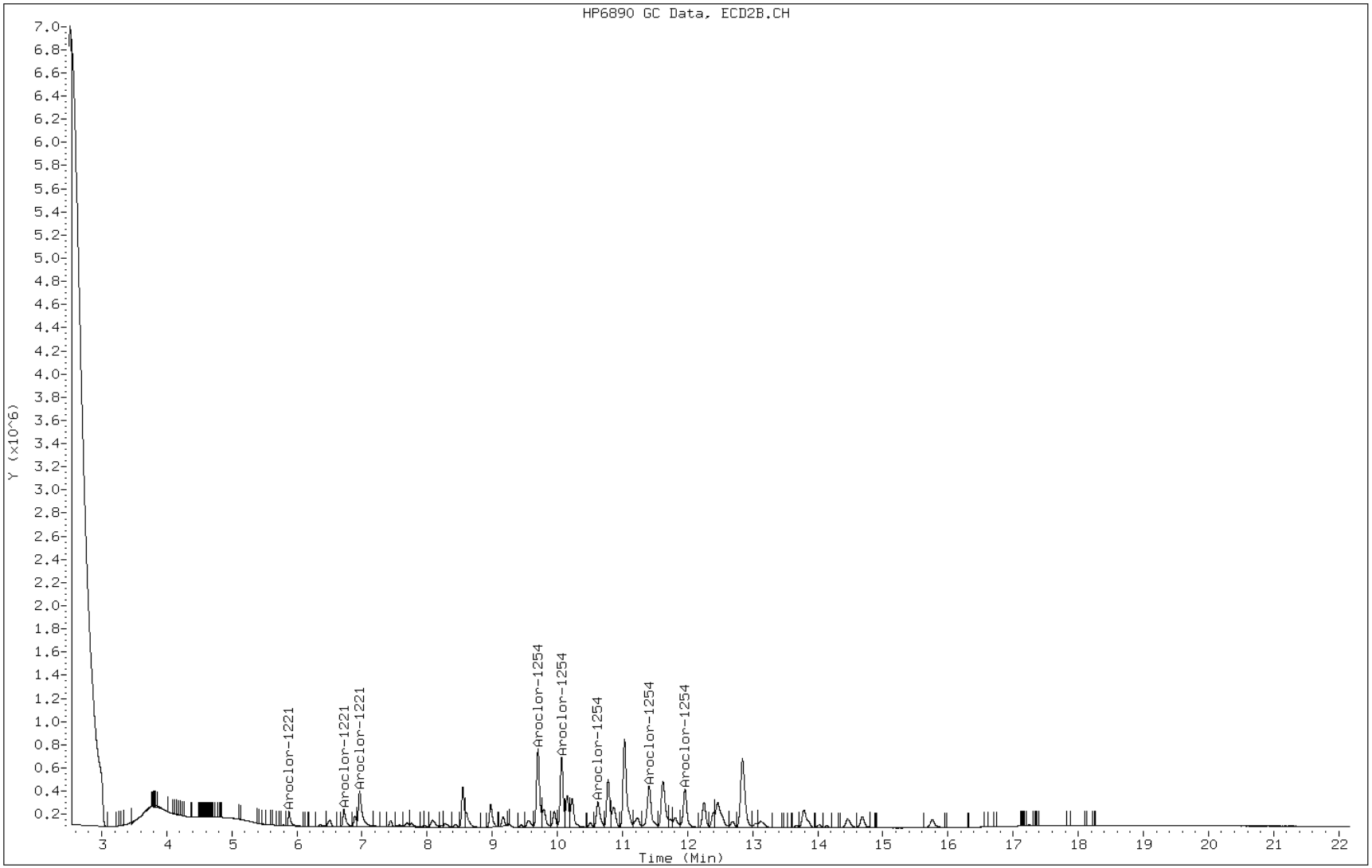
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: P1030403.D

Date: 14-OCT-2013 17:01

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030404.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030404.D
Lab Smp Id: IC 876010
Inj Date : 14-OCT-2013 17:30
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : IC 876010
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 01:47 Cal File: P1030421.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 2154.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
1 Aroclor-1221					CAS #: 11104-28-2		
5.875	5.870	0.005	250791	1.00000	1.1380	0.00- 0.00	0.00
6.716	6.711	0.005	321570	1.00000	1.1010	136.57- 136.57	0.00
6.957	6.952	0.005	654285	1.00000	1.1951	86.04- 86.04	0.00
	Average of Peak Amounts =				1.14470		
7 Aroclor-1254					CAS #: 11097-69-1		
9.700	9.700	0.000	1344359	1.00000	0.99194	0.00- 0.00	0.00(a)
10.062	10.063	-0.001	1240457	1.00000	1.0230	112.23- 112.23	0.00
10.619	10.619	0.000	442640	1.00000	1.0150	97.40- 97.40	0.00
11.407	11.408	-0.001	694163	1.00000	0.94111	71.09- 71.09	0.00
11.955	11.955	0.000	654041	1.00000	0.97747	85.01- 85.01	0.00
	Average of Peak Amounts =				0.98970		

QC Flag Legend

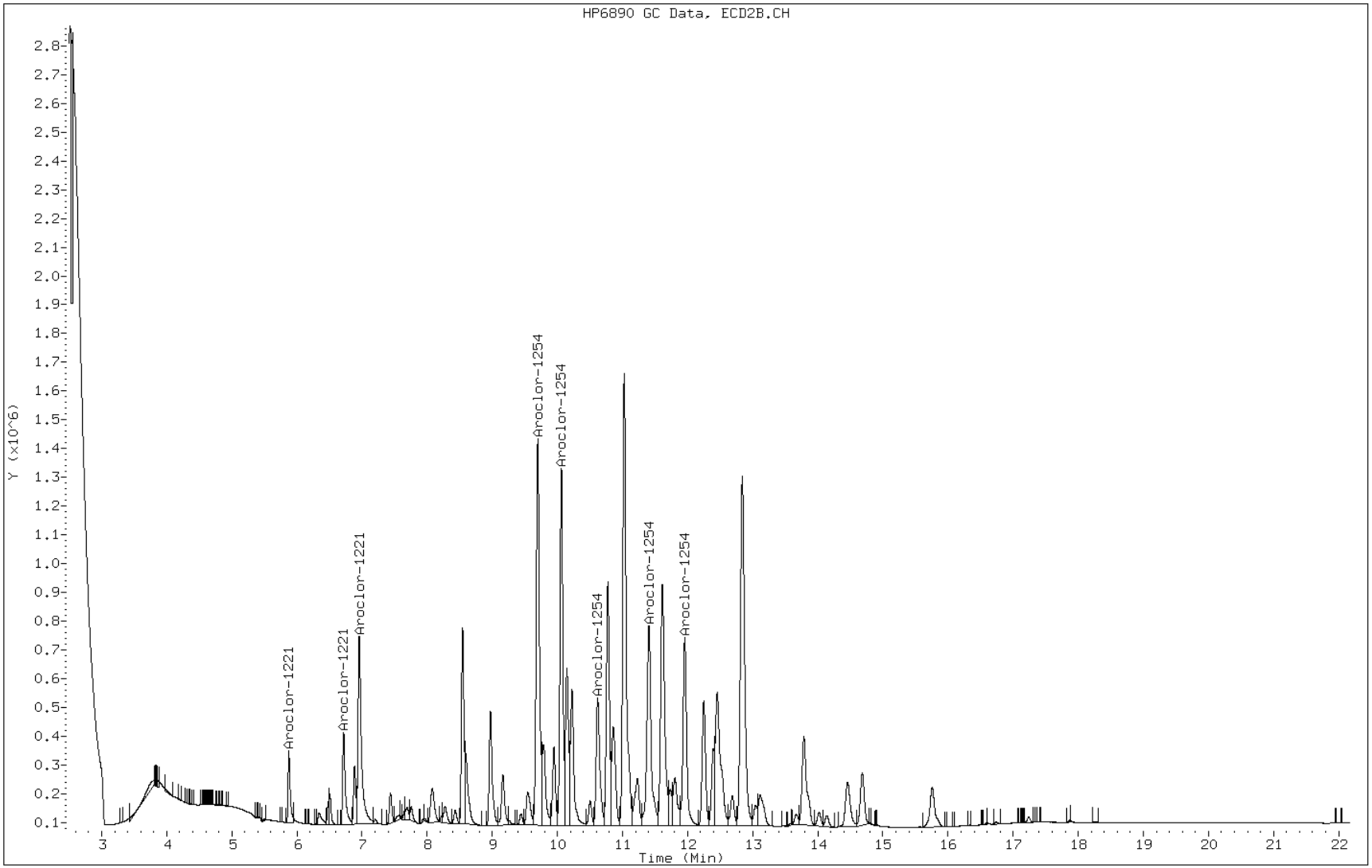
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: P1030404.D

Date: 14-OCT-2013 17:30

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 17:59 Calibration End Date: 10/14/2013 19:56 Calibration ID: 11836

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/6	P1030405.D
Level 2	IC 180-86759/7	P1030406.D
Level 3	IC 180-86759/8	P1030407.D
Level 4	IC 180-86759/9	P1030408.D
Level 5	IC 180-86759/10	P1030409.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
PCB-1242 Peak 1	7.760	7.756	7.753	7.748	7.745						7.695 - 7.795	7.752
PCB-1242 Peak 2	8.442	8.440	8.431	8.423	8.413						8.363 - 8.463	8.430
PCB-1242 Peak 3	9.168	9.168	9.162	9.158	9.154						9.104 - 9.204	9.162
PCB-1242 Peak 4	9.576	9.564	9.555	9.544	9.535						9.485 - 9.585	9.555
PCB-1242 Peak 5	10.221	10.219	10.204	10.192	10.179						10.129 - 10.229	10.203

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 17:59 Calibration End Date: 10/14/2013 19:56 Calibration ID: 11836

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/6	P1030405.D
Level 2	IC 180-86759/7	P1030406.D
Level 3	IC 180-86759/8	P1030407.D
Level 4	IC 180-86759/9	P1030408.D
Level 5	IC 180-86759/10	P1030409.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
PCB-1242 Peak 1	449100 524877	427260	403608	432458	Ave		447460.600				10.3		20.0			
PCB-1242 Peak 2	412800 578009	464460	483556	467820	Ave		481329.000				12.5		20.0			
PCB-1242 Peak 3	506100 664379	535220	536216	514012	Ave		551185.400				11.7		20.0			
PCB-1242 Peak 4	210600 325284	191960	208068	218036	Ave		230789.600				23.3	*	20.0			
PCB-1242 Peak 5	400900 520147	398210	403052	394688	Ave		423399.400				12.8		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 17:59 Calibration End Date: 10/14/2013 19:56 Calibration ID: 11836

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/6	P1030405.D
Level 2	IC 180-86759/7	P1030406.D
Level 3	IC 180-86759/8	P1030407.D
Level 4	IC 180-86759/9	P1030408.D
Level 5	IC 180-86759/10	P1030409.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1242 Peak 1	Ave	4491	42726	100902	216229	524877	0.0100	0.100	0.250	0.500	1.00
PCB-1242 Peak 2	Ave	4128	46446	120889	233910	578009	0.0100	0.100	0.250	0.500	1.00
PCB-1242 Peak 3	Ave	5061	53522	134054	257006	664379	0.0100	0.100	0.250	0.500	1.00
PCB-1242 Peak 4	Ave	2106	19196	52017	109018	325284	0.0100	0.100	0.250	0.500	1.00
PCB-1242 Peak 5	Ave	4009	39821	100763	197344	520147	0.0100	0.100	0.250	0.500	1.00

Curve Type Legend:
Ave = Average by Height

Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030405.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030405.D
Lab Smp Id: IC 876011
Inj Date : 14-OCT-2013 17:59
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : IC 876011
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 02:16 Cal File: P1030422.D
Als bottle: 98 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
5 Aroclor-1242					CAS #: 53469-21-9		
7.759	7.745	0.014	4491	0.01000	0.010037	0.00- 0.00	0.00(aM)
8.442	8.413	0.029	4128	0.01000	0.0085762	330.13- 330.13	0.00
9.168	9.154	0.014	5061	0.01000	0.0091820	769.70- 769.70	0.00
9.576	9.535	0.041	2106	0.01000	0.0091252	532.48- 532.48	0.00
10.220	10.179	0.041	4009	0.01000	0.0094686	334.30- 334.30	0.00
		Average of Peak Amounts =			0.00928		

QC Flag Legend

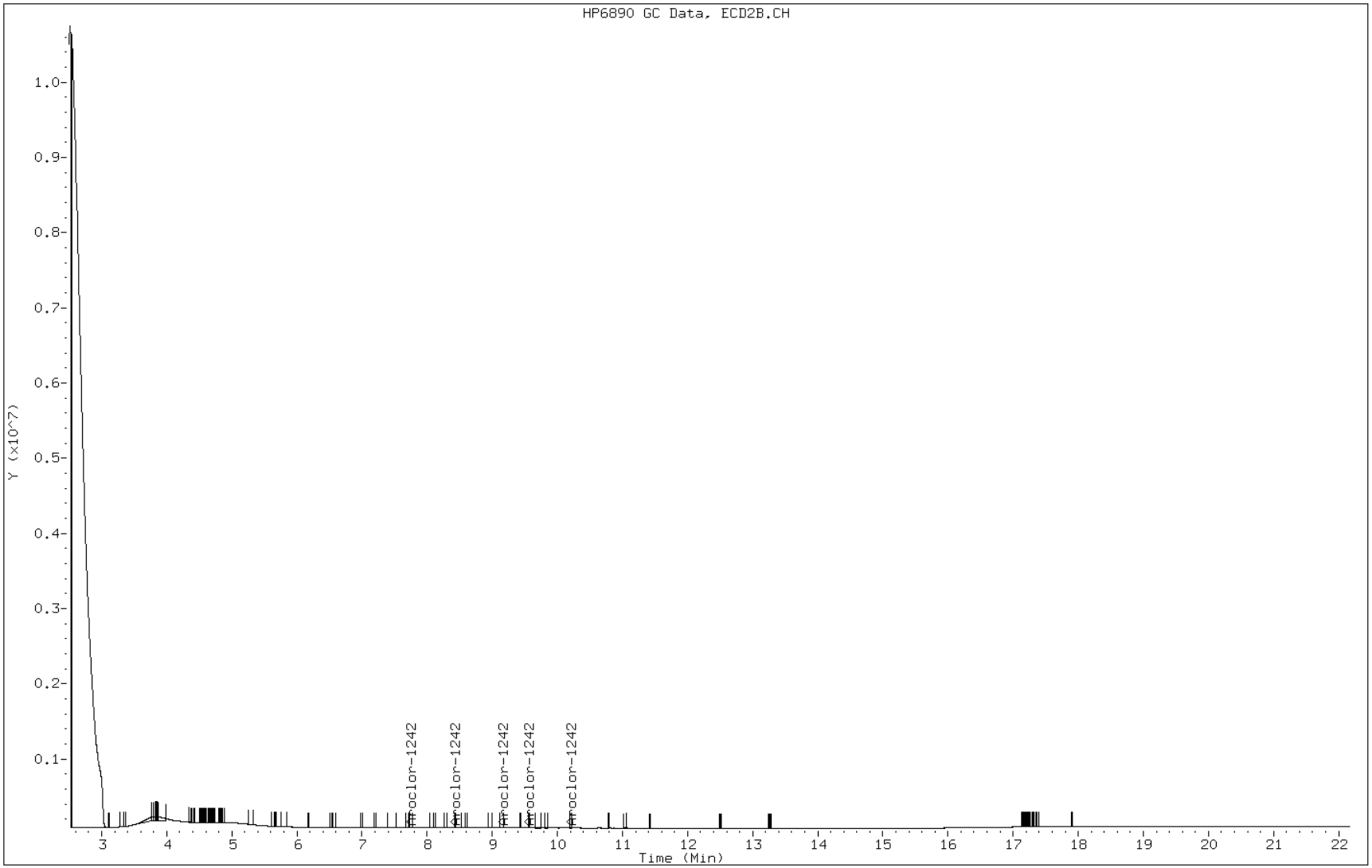
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: P1030405.D

Date: 14-OCT-2013 17:59

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



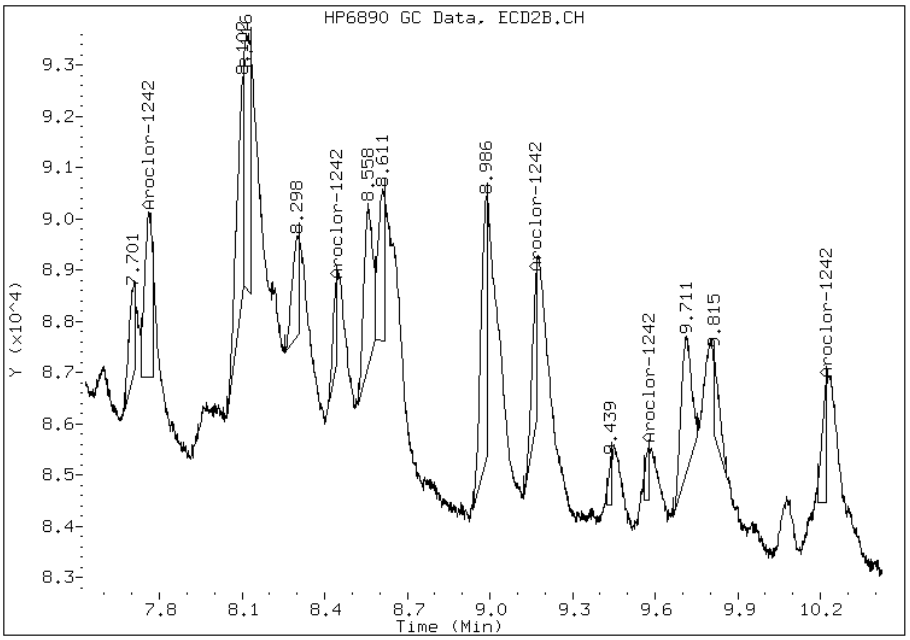
Manual Integration Report

Data File: P1030405.D
Inj. Date and Time: 14-OCT-2013 17:59
Instrument ID: gc8.i
Client ID:
Compound: 5 Aroclor-1242
CAS #: 53469-21-9
Report Date: 10/15/2013

Processing Integration Results

RT	Response	Conc
7.76	3245*	0.01
8.44	1665*	0.00
9.17	2895*	0.01
9.58	1086*	0.01
10.22	2403*	0.01

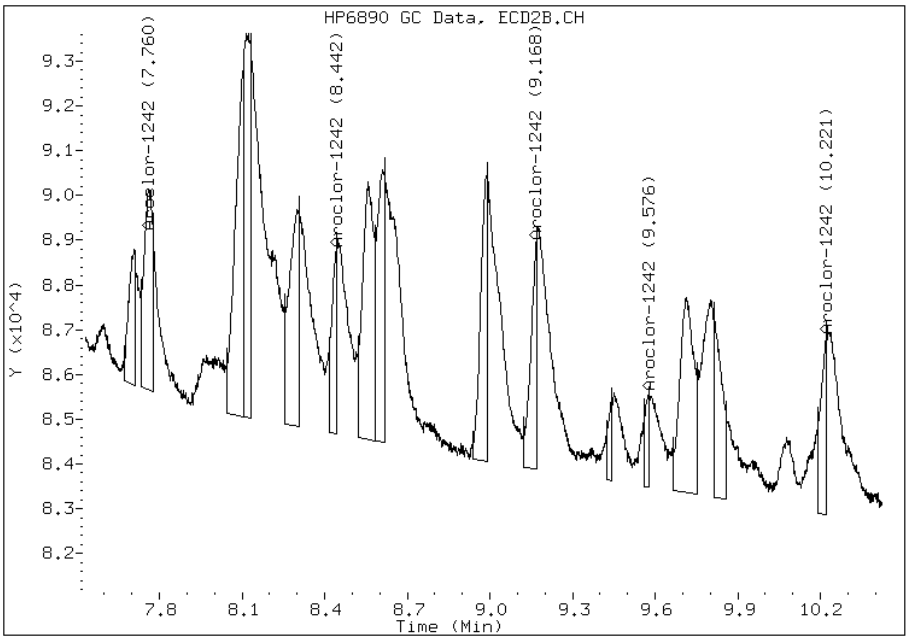
Final Conc		0.01



Manual Integration Results

RT	Response	Conc
7.76	4491*	0.01
8.44	4128*	0.01
9.17	5061*	0.01
9.58	2106*	0.01
10.22	4009*	0.01

Final Conc		0.01



Manually Integrated By: guptaa
Modification Date: 15-Oct-2013 09:02
Manual Integration Reason: Poor Chromatography

Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030406.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030406.D
Lab Smp Id: IC 876012
Inj Date : 14-OCT-2013 18:29
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : IC 876012
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 00:19 Cal File: P1030418.D
Als bottle: 8 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
5 Aroclor-1242					CAS #: 53469-21-9		
7.755	7.745	0.010	42726	0.10000	0.095486	0.00- 0.00	0.00(a)
8.440	8.413	0.027	46446	0.10000	0.096495	330.13- 330.13	0.00
9.167	9.154	0.013	53522	0.10000	0.097103	769.70- 769.70	0.00
9.564	9.535	0.029	19196	0.10000	0.083175	532.48- 532.48	0.00
10.219	10.179	0.040	39821	0.10000	0.094051	334.30- 334.30	0.00
		Average of Peak Amounts =			0.09326		

QC Flag Legend

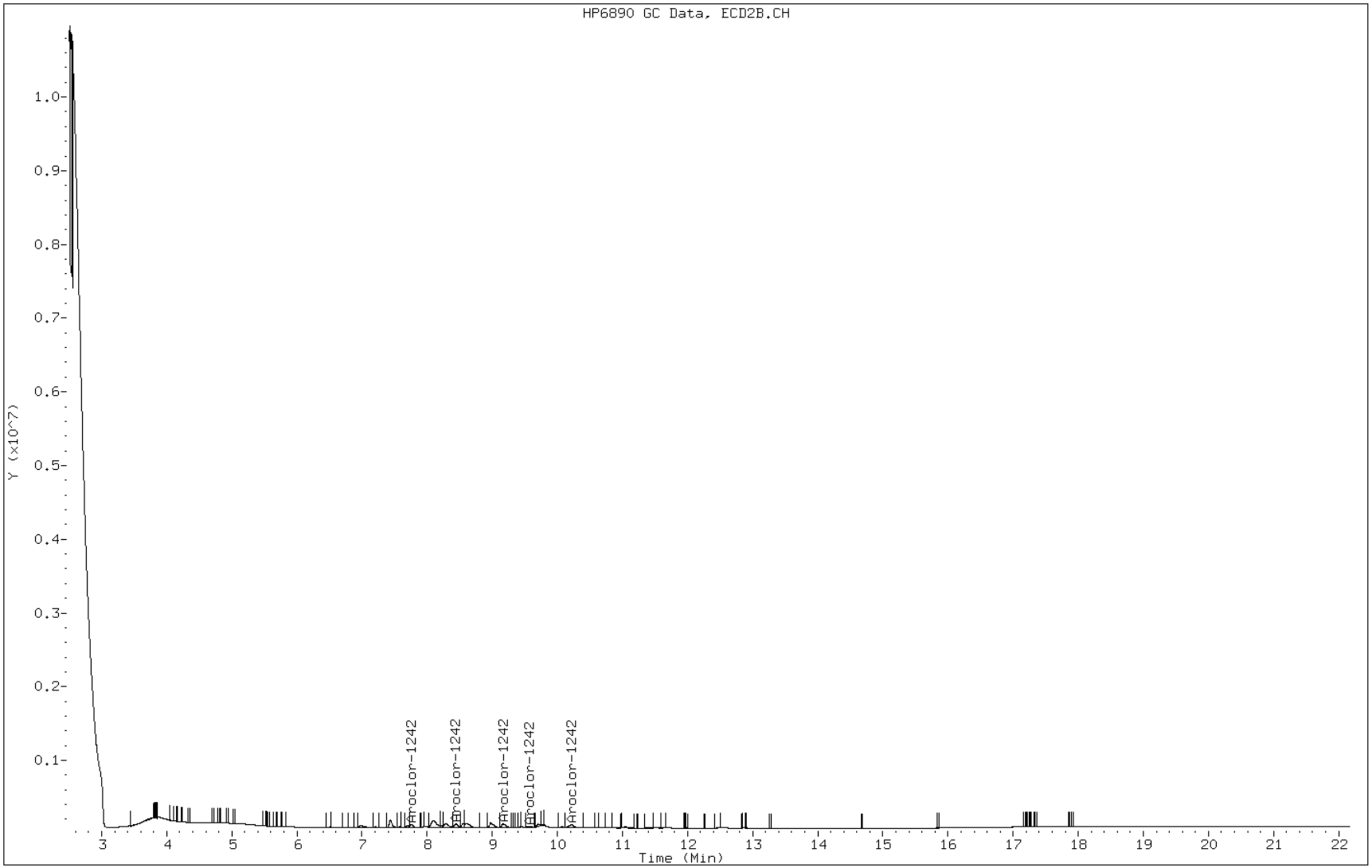
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: P1030406.D

Date: 14-OCT-2013 18:29

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030407.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030407.D
Lab Smp Id: IC 876013
Inj Date : 14-OCT-2013 18:58
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : IC 876013
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 00:48 Cal File: P1030419.D
Als bottle: 9 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
5 Aroclor-1242					CAS #: 53469-21-9		
7.752	7.745	0.007	100902	0.25000	0.22550	0.00- 0.00	0.00(a)
8.431	8.413	0.018	120889	0.25000	0.25116	330.13- 330.13	0.00
9.162	9.154	0.008	134054	0.25000	0.24321	769.70- 769.70	0.00
9.555	9.535	0.020	52017	0.25000	0.22539	532.48- 532.48	0.00
10.203	10.179	0.024	100763	0.25000	0.23798	334.30- 334.30	0.00
		Average of Peak Amounts =			0.23665		

QC Flag Legend

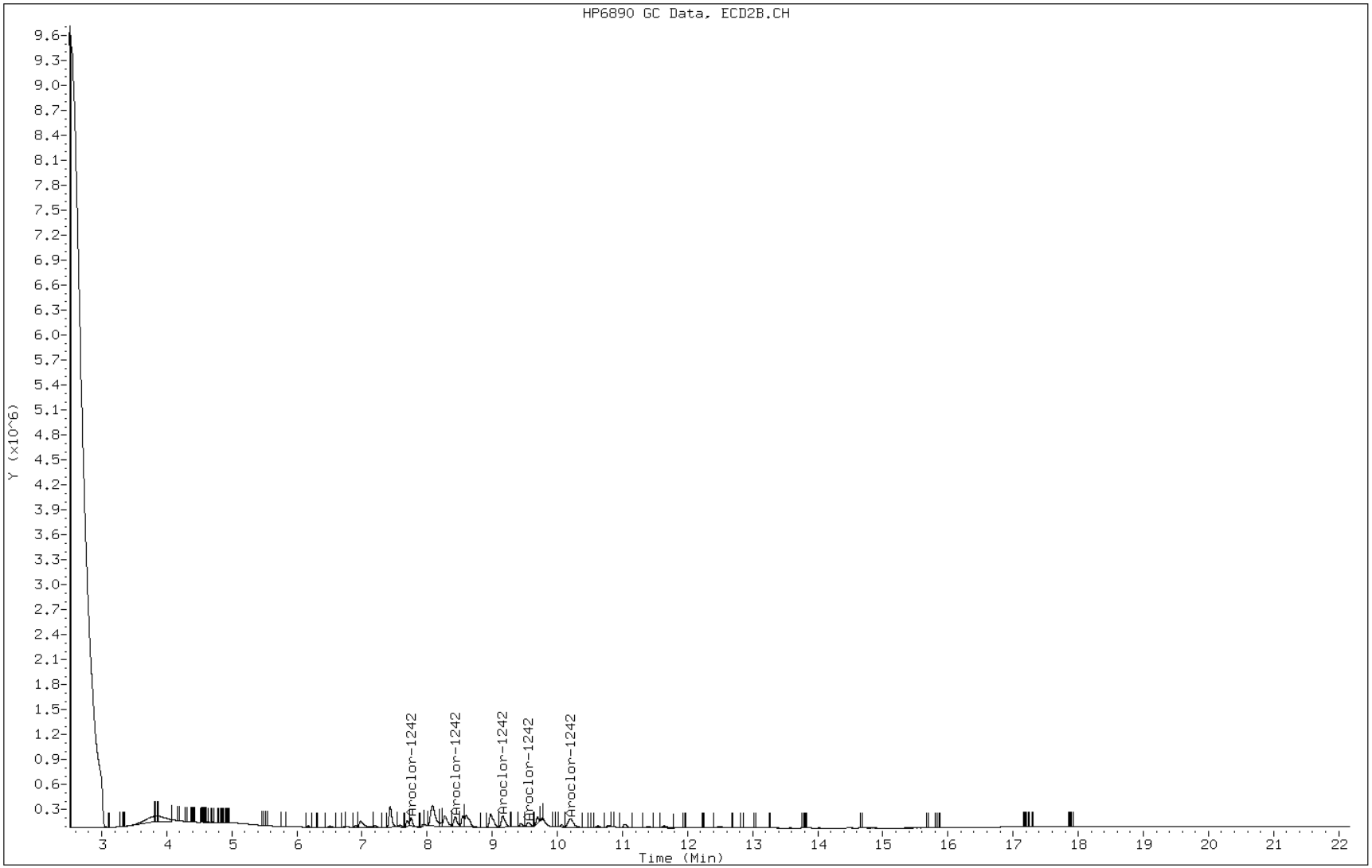
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: P1030407.D

Date: 14-OCT-2013 18:58

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030408.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030408.D
Lab Smp Id: IC 876014
Inj Date : 14-OCT-2013 19:27
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : IC 876014
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 01:17 Cal File: P1030420.D
Als bottle: 10 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
5 Aroclor-1242					CAS #: 53469-21-9		
7.747	7.745	0.002	216229	0.50000	0.48324	0.00- 0.00	0.00(a)
8.422	8.413	0.009	233910	0.50000	0.48597	330.13- 330.13	0.00
9.157	9.154	0.003	257006	0.50000	0.46628	769.70- 769.70	0.00
9.544	9.535	0.009	109018	0.50000	0.47237	532.48- 532.48	0.00
10.191	10.179	0.012	197344	0.50000	0.46609	334.30- 334.30	0.00
		Average of Peak Amounts =			0.47479		

QC Flag Legend

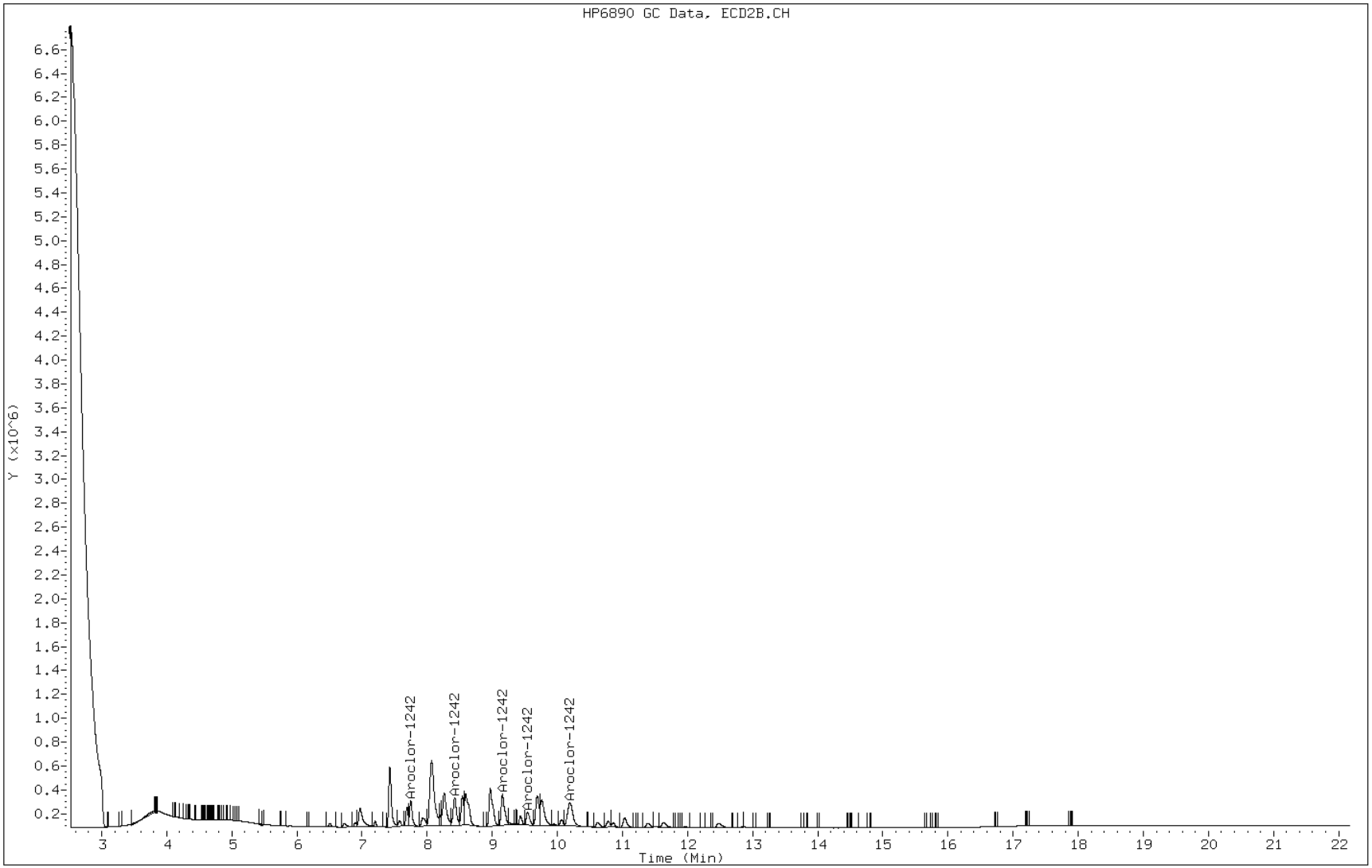
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: P1030408.D

Date: 14-OCT-2013 19:27

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030409.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030409.D
Lab Smp Id: IC 876015
Inj Date : 14-OCT-2013 19:56
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : IC 876015
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 01:47 Cal File: P1030421.D
Als bottle: 11 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

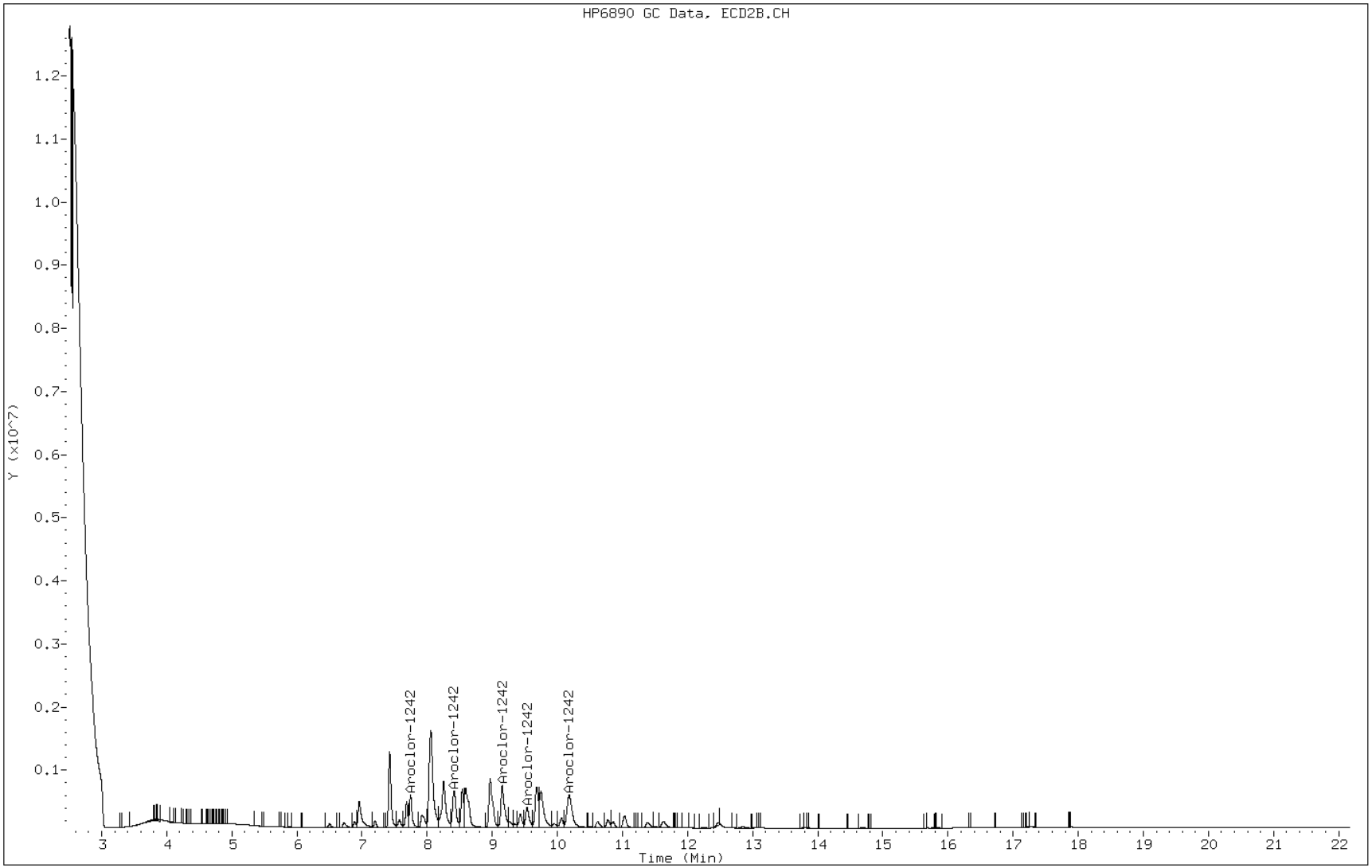
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
5 Aroclor-1242					CAS #: 53469-21-9			
7.745	7.745	0.000	524877	1.00000	1.1730	0.00-	0.00	0.00
8.412	8.413	-0.001	578009	1.00000	1.2009	330.13-	330.13	0.00
9.153	9.154	-0.001	664379	1.00000	1.2054	769.70-	769.70	0.00
9.535	9.535	0.000	325284	1.00000	1.4094	532.48-	532.48	0.00
10.179	10.179	0.000	520147	1.00000	1.2285	334.30-	334.30	0.00
Average of Peak Amounts =					1.24344			

Data File: P1030409.D

Date: 14-OCT-2013 19:56

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 20:25 Calibration End Date: 10/14/2013 22:22 Calibration ID: 11837

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/11	P1030410.D
Level 2	IC 180-86759/12	P1030411.D
Level 3	IC 180-86759/13	P1030412.D
Level 4	IC 180-86759/14	P1030413.D
Level 5	IC 180-86759/15	P1030414.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
PCB-1248 Peak 1	8.102	8.103	8.091	8.079	8.067						8.017 - 8.117	8.088
PCB-1248 Peak 2	8.987	8.980	8.974	8.970	8.968						8.918 - 9.018	8.976
PCB-1248 Peak 3	9.178	9.167	9.161	9.158	9.154						9.104 - 9.204	9.164
PCB-1248 Peak 4	10.234	10.221	10.205	10.190	10.178						10.184 - 10.284	10.206
PCB-1248 Peak 5	11.052	11.042	11.037	11.034	11.031						10.981 - 11.081	11.039

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 20:25 Calibration End Date: 10/14/2013 22:22 Calibration ID: 11837

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/11	P1030410.D
Level 2	IC 180-86759/12	P1030411.D
Level 3	IC 180-86759/13	P1030412.D
Level 4	IC 180-86759/14	P1030413.D
Level 5	IC 180-86759/15	P1030414.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
PCB-1248 Peak 1	489300 701680	543640	579108	611460	Ave		585037.600				13.6		20.0			
PCB-1248 Peak 2	1002600 1136938	1045510	1081304	1063062	Ave		1065882.80				4.6		20.0			
PCB-1248 Peak 3	840800 984218	872930	899892	894842	Ave		898536.400				5.9		20.0			
PCB-1248 Peak 4	745700 765597	714370	697980	693776	Ave		723484.600				4.3		20.0			
PCB-1248 Peak 5	516000 518083	495360	498480	499734	Ave		505531.400				2.1		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 20:25 Calibration End Date: 10/14/2013 22:22 Calibration ID: 11837

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/11	P1030410.D
Level 2	IC 180-86759/12	P1030411.D
Level 3	IC 180-86759/13	P1030412.D
Level 4	IC 180-86759/14	P1030413.D
Level 5	IC 180-86759/15	P1030414.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1248 Peak 1	Ave	4893	54364	144777	305730	701680	0.0100	0.100	0.250	0.500	1.00
PCB-1248 Peak 2	Ave	10026	104551	270326	531531	1136938	0.0100	0.100	0.250	0.500	1.00
PCB-1248 Peak 3	Ave	8408	87293	224973	447421	984218	0.0100	0.100	0.250	0.500	1.00
PCB-1248 Peak 4	Ave	7457	71437	174495	346888	765597	0.0100	0.100	0.250	0.500	1.00
PCB-1248 Peak 5	Ave	5160	49536	124620	249867	518083	0.0100	0.100	0.250	0.500	1.00

Curve Type Legend:
Ave = Average by Height

Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030410.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030410.D
Lab Smp Id: IC 876016
Inj Date : 14-OCT-2013 20:25
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : IC 876016
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 02:16 Cal File: P1030422.D
Als bottle: 97 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
6 Aroclor-1248					CAS #: 12672-29-6		
8.102	8.067	0.035	4893	0.01000	0.0083636	0.00- 0.00	0.00(aM)
8.987	8.968	0.019	10026	0.01000	0.0094063	134.57- 134.57	0.00
9.177	9.154	0.023	8408	0.01000	0.0093574	83.67- 83.67	0.00
10.233	10.233	0.000	7457	0.01000	0.010307	63.86- 63.86	0.00
11.052	11.031	0.021	5160	0.01000	0.010207	148.08- 148.08	0.00
		Average of Peak Amounts =			0.00953		

QC Flag Legend

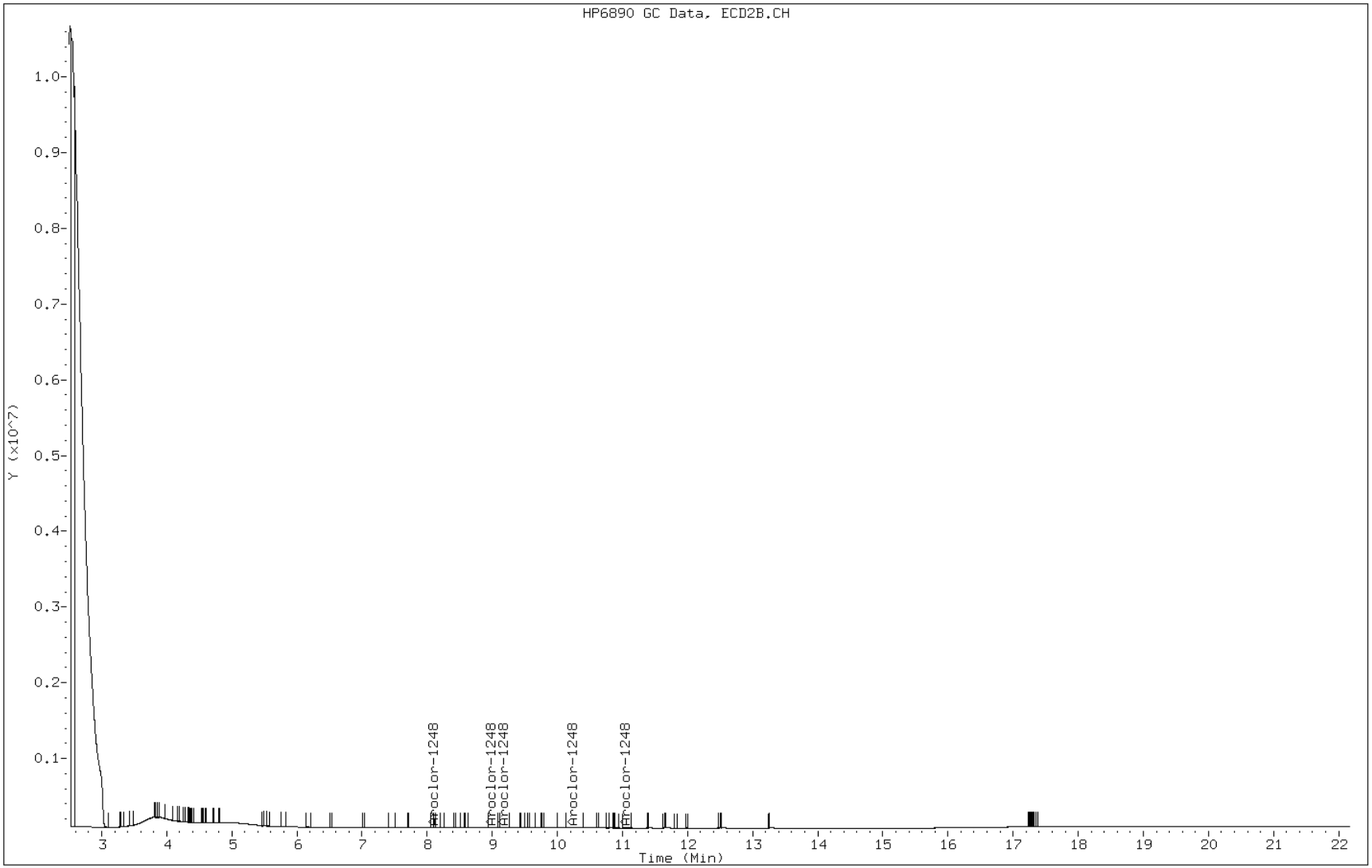
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: P1030410.D

Date: 14-OCT-2013 20:25

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



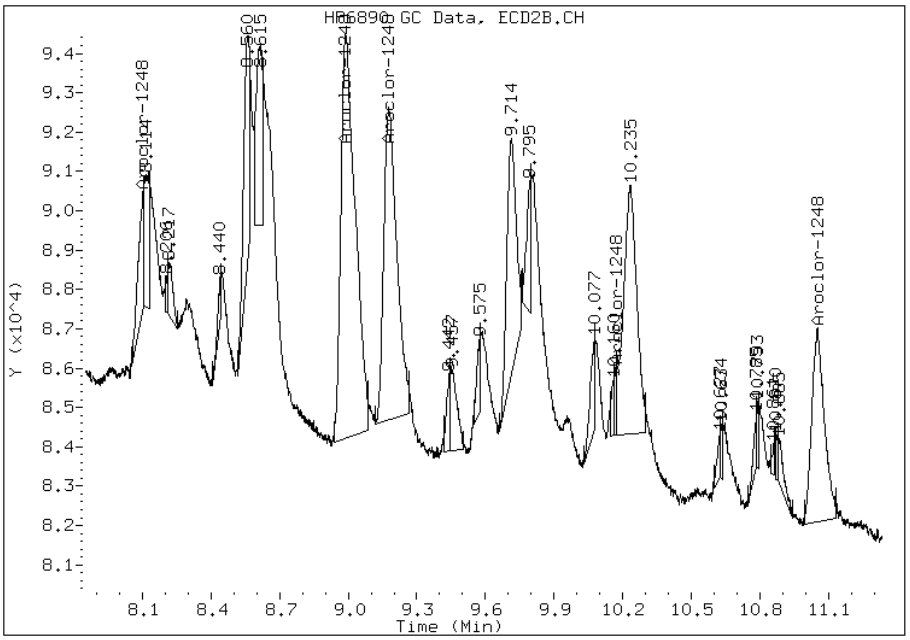
Manual Integration Report

Data File: P1030410.D
Inj. Date and Time: 14-OCT-2013 20:25
Instrument ID: gc8.i
Client ID:
Compound: 6 Aroclor-1248
CAS #: 12672-29-6
Report Date: 10/15/2013

Processing Integration Results

RT	Response	Conc
8.10	2980*	0.01
8.99	10285*	0.01
9.18	7966*	0.01
10.17	1754*	0.00
11.05	4934*	0.01

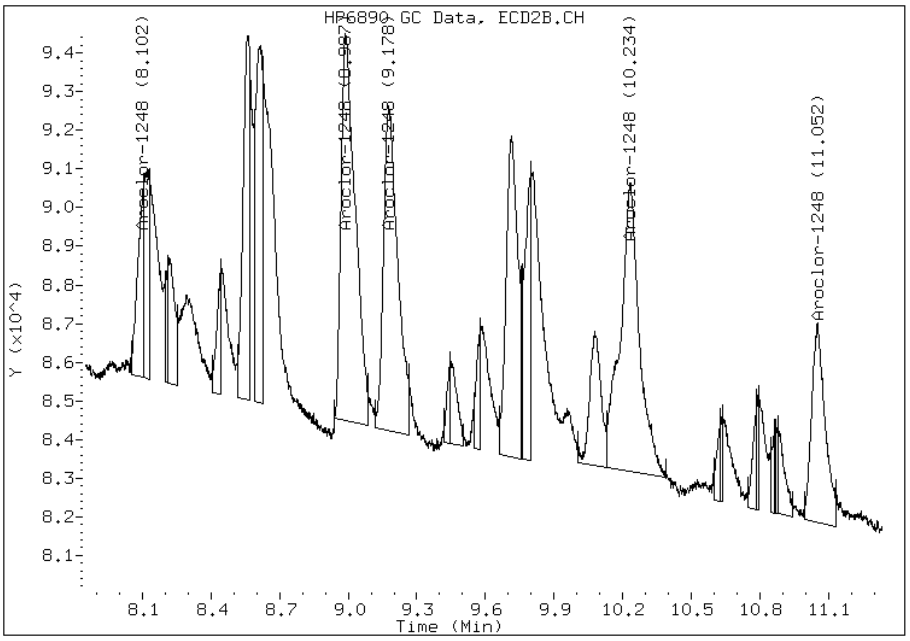
Final Conc		0.01



Manual Integration Results

RT	Response	Conc
8.10	4893*	0.01
8.99	10026*	0.01
9.18	8408*	0.01
10.23	7457*	0.01
11.05	5160*	0.01

Final Conc		0.01



Manually Integrated By: guptaa
Modification Date: 15-Oct-2013 09:04
Manual Integration Reason:

Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030411.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030411.D
Lab Smp Id: IC 876017
Inj Date : 14-OCT-2013 20:55
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : IC 876017
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 00:19 Cal File: P1030418.D
Als bottle: 13 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
6 Aroclor-1248					CAS #: 12672-29-6		
8.103	8.067	0.036	54364	0.10000	0.092924	0.00- 0.00	0.00(a)
8.979	8.968	0.011	104551	0.10000	0.098089	134.57- 134.57	0.00
9.167	9.154	0.013	87293	0.10000	0.097150	83.67- 83.67	0.00
10.221	10.233	-0.012	71437	0.10000	0.098740	63.86- 63.86	0.00
11.042	11.031	0.011	49536	0.10000	0.097988	148.08- 148.08	0.00
Average of Peak Amounts =					0.09698		

QC Flag Legend

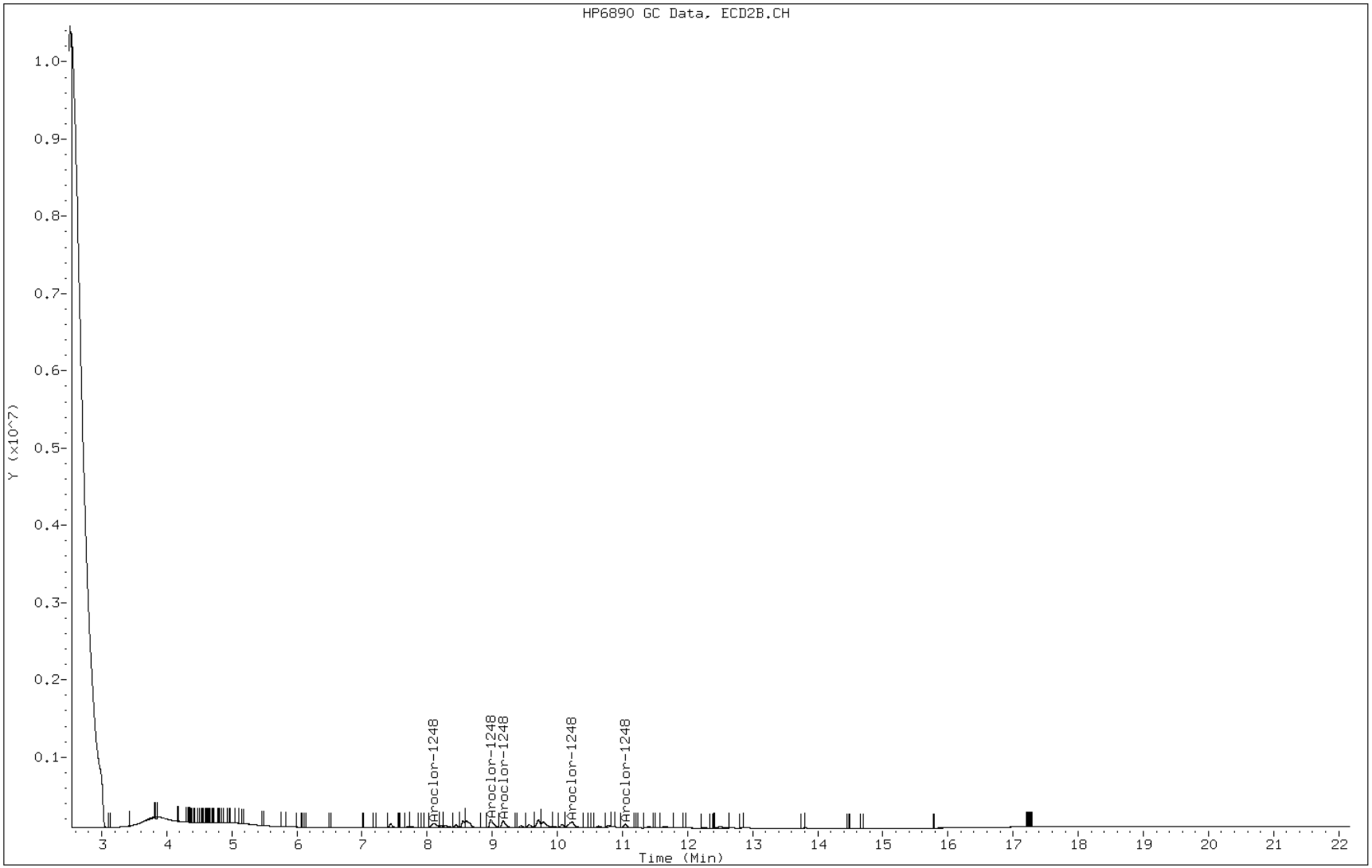
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: P1030411.D

Date: 14-OCT-2013 20:55

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030412.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030412.D
Lab Smp Id: IC 876018
Inj Date : 14-OCT-2013 21:24
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : IC 876018
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 00:48 Cal File: P1030419.D
Als bottle: 14 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
6 Aroclor-1248					CAS #: 12672-29-6		
8.091	8.067	0.024	144777	0.25000	0.24747	0.00- 0.00	0.00(a)
8.974	8.968	0.006	270326	0.25000	0.25362	134.57- 134.57	0.00
9.161	9.154	0.007	224973	0.25000	0.25038	83.67- 83.67	0.00
10.205	10.233	-0.028	174495	0.25000	0.24119	63.86- 63.86	0.00
11.036	11.031	0.005	124620	0.25000	0.24651	148.08- 148.08	0.00
		Average of Peak Amounts =			0.24783		

QC Flag Legend

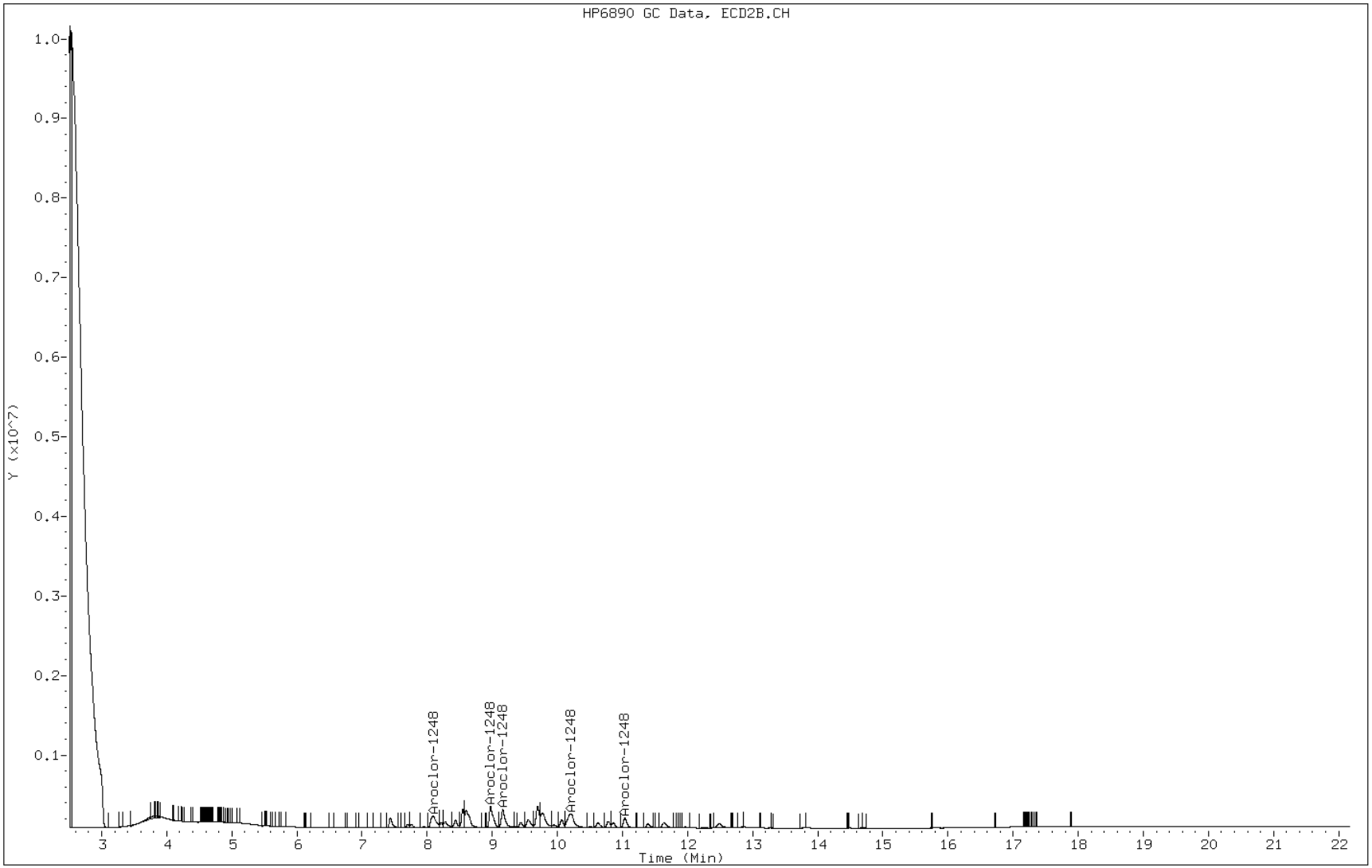
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: P1030412.D

Date: 14-OCT-2013 21:24

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030413.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030413.D
Lab Smp Id: IC 876029
Inj Date : 14-OCT-2013 21:53
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : IC 876029
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 01:17 Cal File: P1030420.D
Als bottle: 15 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
6 Aroclor-1248					CAS #: 12672-29-6		
8.078	8.067	0.011	305730	0.50000	0.52258	0.00- 0.00	0.00(a)
8.970	8.968	0.002	531531	0.50000	0.49868	134.57- 134.57	0.00
9.157	9.154	0.003	447421	0.50000	0.49794	83.67- 83.67	0.00
10.189	10.233	-0.044	346888	0.50000	0.47947	63.86- 63.86	0.00
11.033	11.031	0.002	249867	0.50000	0.49427	148.08- 148.08	0.00
		Average of Peak Amounts =			0.49859		

QC Flag Legend

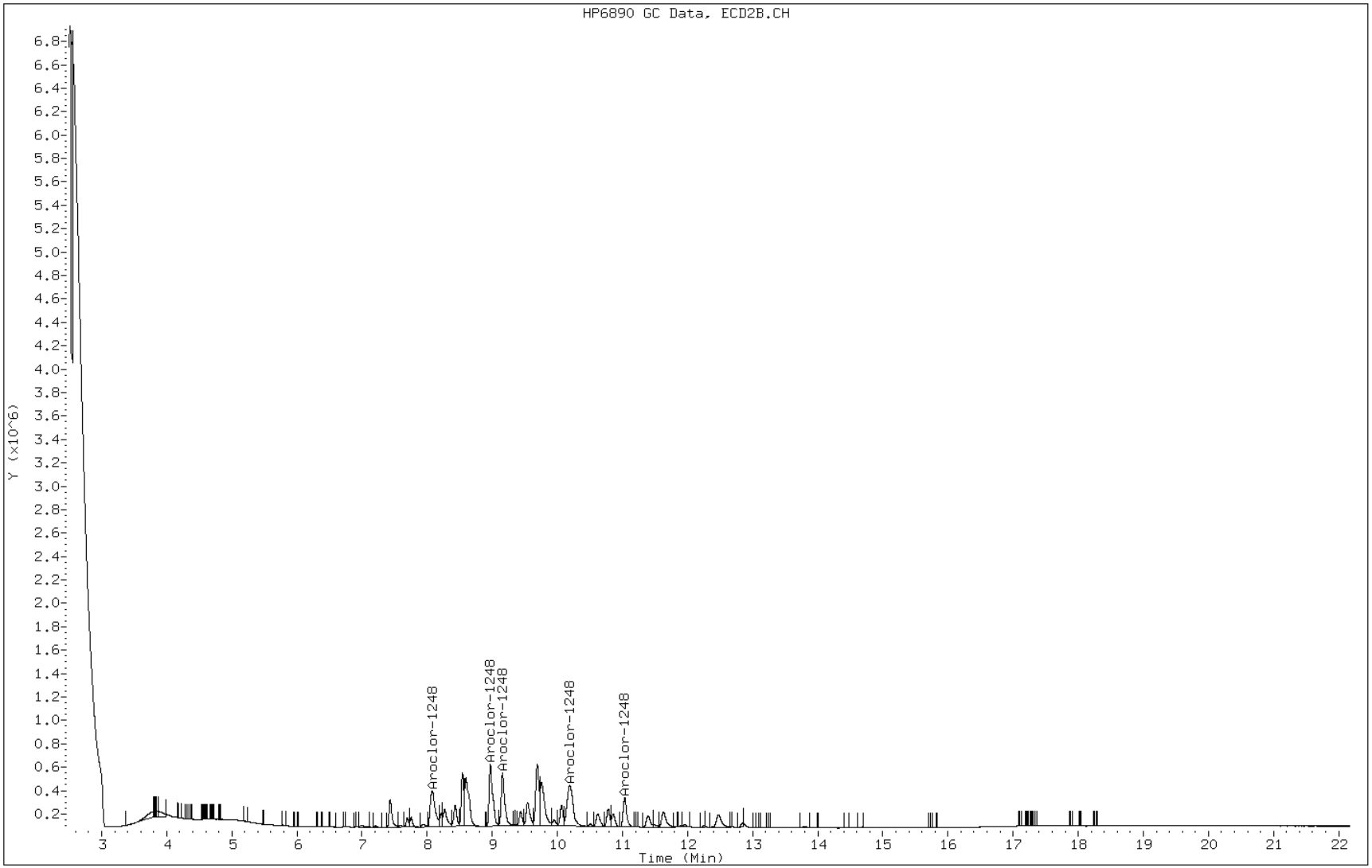
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: P1030413.D

Date: 14-OCT-2013 21:53

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030414.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030414.D
Lab Smp Id: IC 876030
Inj Date : 14-OCT-2013 22:22
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : IC 876030
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 01:47 Cal File: P1030421.D
Als bottle: 16 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

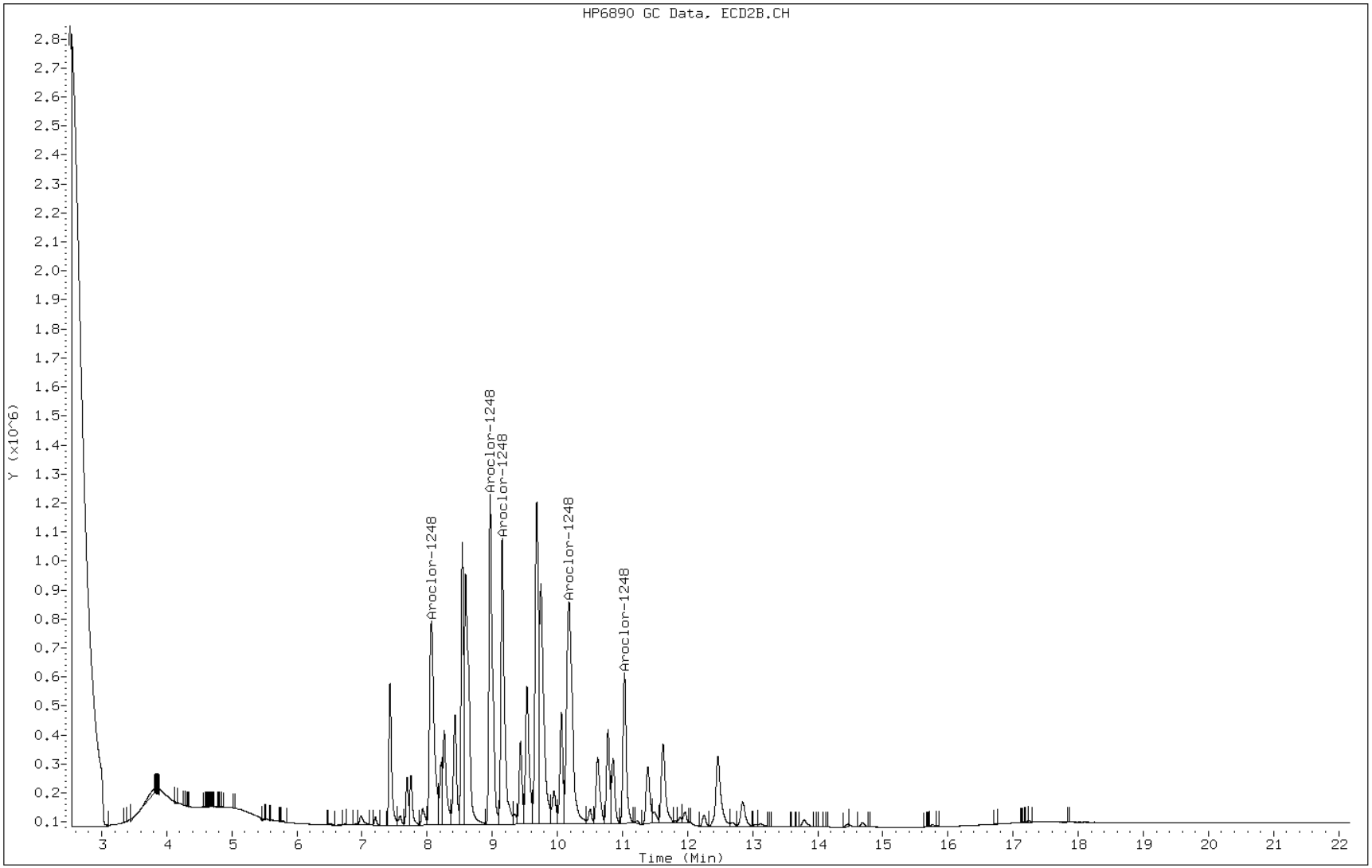
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET	RANGE	RATIO
6 Aroclor-1248						CAS #: 12672-29-6		
8.067	8.067	0.000	701680	1.00000	1.1994	0.00-	0.00	0.00
8.968	8.968	0.000	1136938	1.00000	1.0667	134.57-	134.57	0.00
9.153	9.154	-0.001	984218	1.00000	1.0954	83.67-	83.67	0.00
10.178	10.233	-0.055	765597	1.00000	1.0582	63.86-	63.86	0.00
11.031	11.031	0.000	518083	1.00000	1.0248	148.08-	148.08	0.00
		Average of Peak Amounts =			1.08890			

Data File: P1030414.D

Date: 14-OCT-2013 22:22

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 22:52 Calibration End Date: 10/14/2013 22:52 Calibration ID: 11838

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/16	P1030415.D

ANALYTE	LVL 1										RT WINDOW	AVG RT
PCB-1232 Peak 1	6.727										6.677 - 6.777	6.727
PCB-1232 Peak 2	6.895										6.845 - 6.945	6.895
PCB-1232 Peak 3	8.217										8.167 - 8.267	8.217
PCB-1232 Peak 4	8.548										8.498 - 8.598	8.548
PCB-1232 Peak 5	9.702										9.652 - 9.752	9.702

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 22:52 Calibration End Date: 10/14/2013 22:52 Calibration ID: 11838

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/16	P1030415.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1232 Peak 1	158486				Ave		158486.000						20.0			
PCB-1232 Peak 2	117102				Ave		117102.000						20.0			
PCB-1232 Peak 3	120258				Ave		120258.000						20.0			
PCB-1232 Peak 4	314476				Ave		314476.000						20.0			
PCB-1232 Peak 5	273866				Ave		273866.000						20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 22:52 Calibration End Date: 10/14/2013 22:52 Calibration ID: 11838

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/16	P1030415.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1					LVL 1				
PCB-1232 Peak 1	Ave	79243					0.500				
PCB-1232 Peak 2	Ave	58551					0.500				
PCB-1232 Peak 3	Ave	60129					0.500				
PCB-1232 Peak 4	Ave	157238					0.500				
PCB-1232 Peak 5	Ave	136933					0.500				

Curve Type Legend:
Ave = Average by Height

Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030415.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030415.D
Lab Smp Id: IC 876033
Inj Date : 14-OCT-2013 22:52
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : IC 876033
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 02:16 Cal File: P1030422.D
Als bottle: 17 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1232.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
3 Aroclor-1232					CAS #: 11141-16-5		
6.726	6.727	-0.001	79243	0.50000	0.50000	0.00- 0.00	0.00(a)
6.894	6.895	-0.001	58551	0.50000	0.50000	166.26- 166.26	0.00
8.217	8.217	0.000	60129	0.50000	0.50000	85.99- 85.99	0.00
8.548	8.548	0.000	157238	0.50000	0.50000	94.18- 94.18	0.00
9.702	9.702	0.000	136933	0.50000	0.50000	0.00- 0.00	0.00
		Average of Peak Amounts =			0.50000		

QC Flag Legend

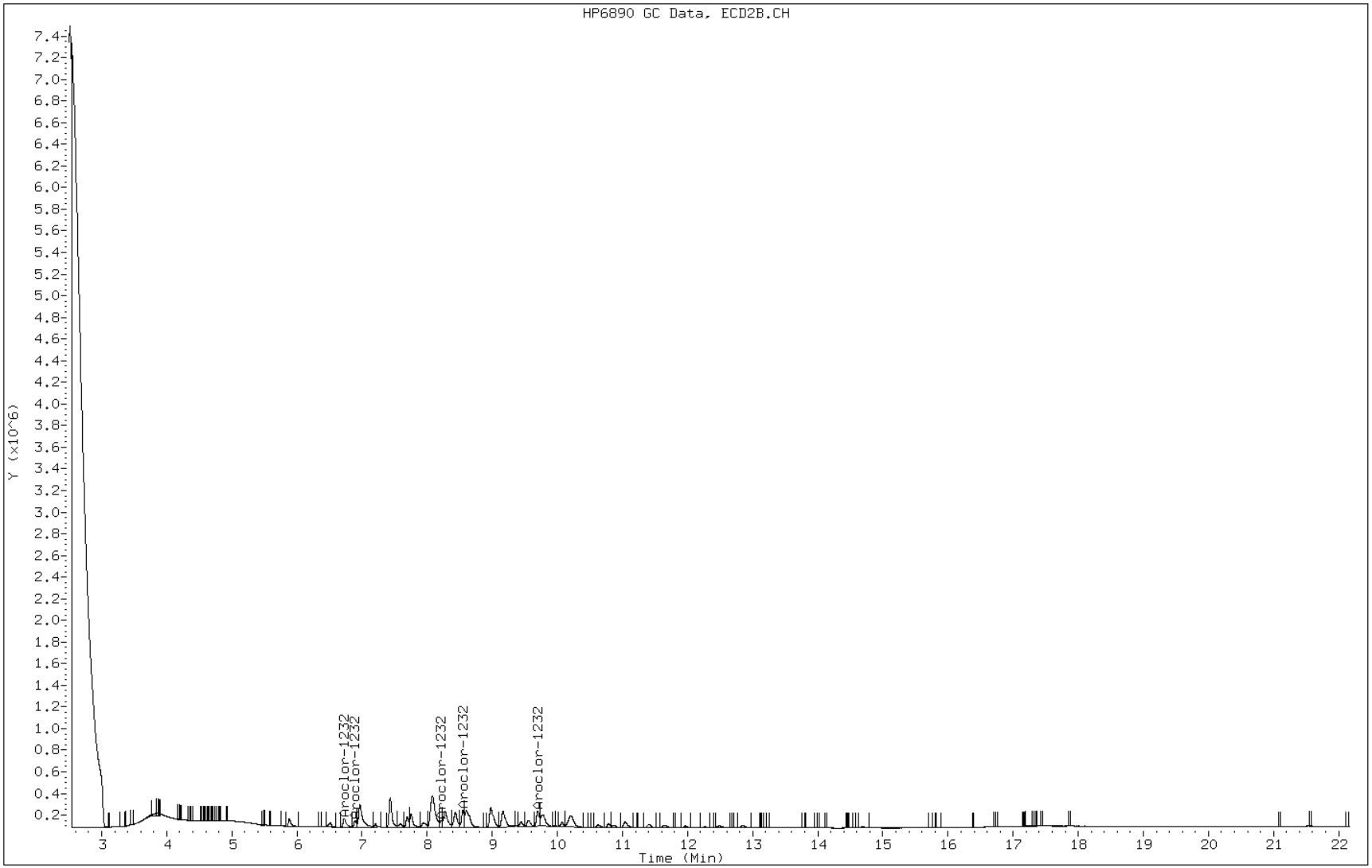
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: P1030415.D

Date: 14-OCT-2013 22:52

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 23:21 Calibration End Date: 10/14/2013 23:21 Calibration ID: 11839

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/17	P1030416.D

ANALYTE	LVL 1										RT WINDOW	AVG RT
PCB-1262 Peak 1	11.411										11.361 - 11.461	11.411
PCB-1262 Peak 2	11.958										11.908 - 12.008	11.958
PCB-1262 Peak 3	13.042										12.992 - 13.092	13.042
PCB-1262 Peak 4	14.014										13.964 - 14.064	14.014
PCB-1262 Peak 5	17.234										17.184 - 17.284	17.234

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 23:21 Calibration End Date: 10/14/2013 23:21 Calibration ID: 11839

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/17	P1030416.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1262 Peak 1	1054564				Ave		1054564.00						20.0			
PCB-1262 Peak 2	1112308				Ave		1112308.00						20.0			
PCB-1262 Peak 3	1573854				Ave		1573854.00						20.0			
PCB-1262 Peak 4	523574				Ave		523574.000						20.0			
PCB-1262 Peak 5	1070404				Ave		1070404.00						20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 23:21 Calibration End Date: 10/14/2013 23:21 Calibration ID: 11839

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/17	P1030416.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1					LVL 1				
PCB-1262 Peak 1	Ave	527282					0.500				
PCB-1262 Peak 2	Ave	556154					0.500				
PCB-1262 Peak 3	Ave	786927					0.500				
PCB-1262 Peak 4	Ave	261787					0.500				
PCB-1262 Peak 5	Ave	535202					0.500				

Curve Type Legend:
Ave = Average by Height

Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030416.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030416.D
Lab Smp Id: IC 876034
Inj Date : 14-OCT-2013 23:21
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : IC 876034
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 01:47 Cal File: P1030421.D
Als bottle: 18 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1262.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

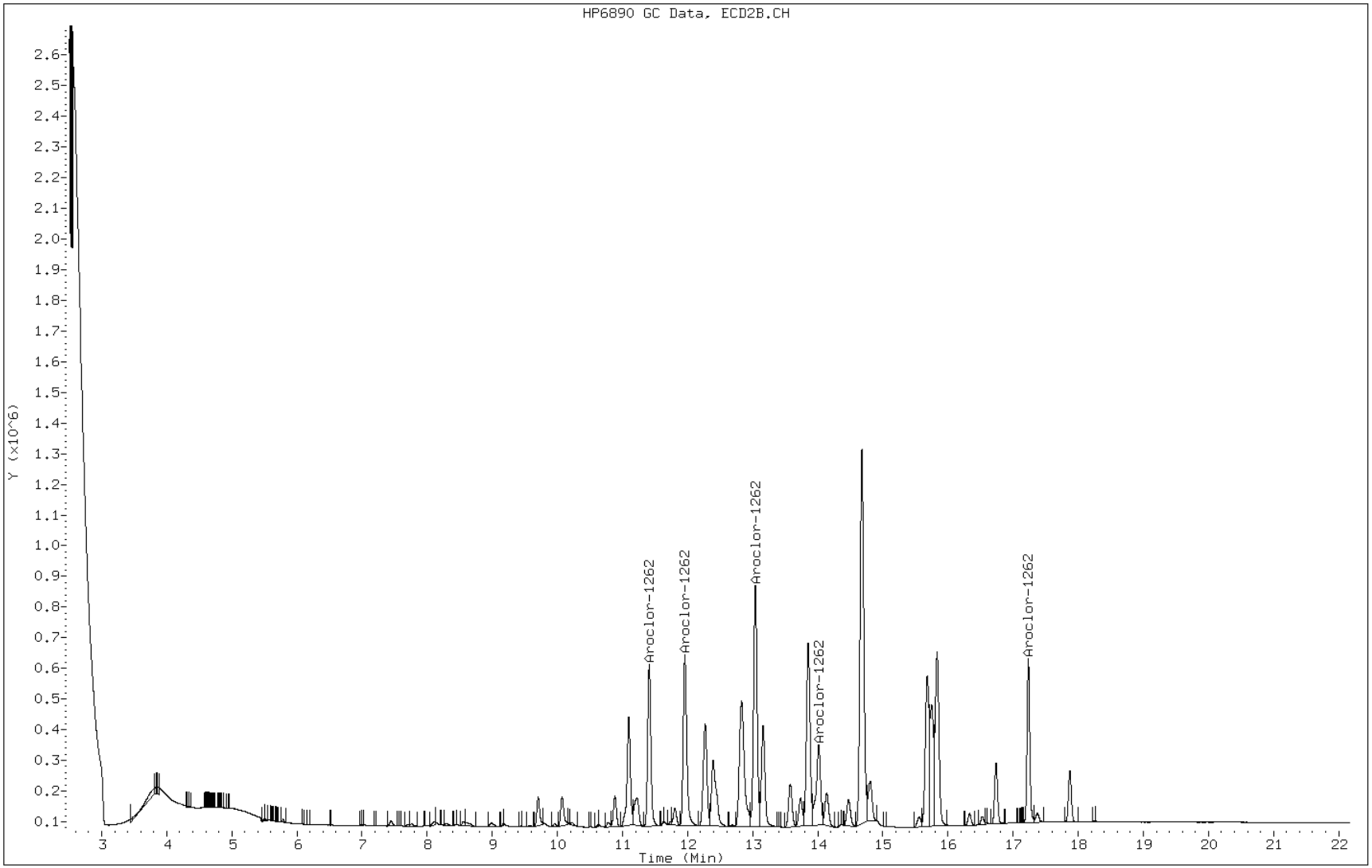
				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
9 Aroclor-1262					CAS #: 37324-23-5		
11.410	11.411	-0.001	527282	0.50000	0.50000	0.00- 0.00	0.00
11.957	11.958	-0.001	556154	0.50000	0.50000	0.00- 0.00	0.00
13.041	13.042	-0.001	786927	0.50000	0.50000	0.00- 0.00	0.00
14.014	14.014	0.000	261787	0.50000	0.50000	0.00- 0.00	0.00
17.234	17.234	0.000	535202	0.50000	0.50000	0.00- 0.00	0.00
		Average of Peak Amounts =			0.50000		

Data File: P1030416.D

Date: 14-OCT-2013 23:21

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 23:50 Calibration End Date: 10/14/2013 23:50 Calibration ID: 11840

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/18	P1030417.D

ANALYTE	LVL 1										RT WINDOW	AVG RT
PCB-1268 Peak 1	15.679										15.629 - 15.729	15.679
PCB-1268 Peak 2	15.831										15.781 - 15.881	15.831
PCB-1268 Peak 3	16.330										16.280 - 16.380	16.331
PCB-1268 Peak 4	17.870										17.820 - 17.920	17.870

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 23:50 Calibration End Date: 10/14/2013 23:50 Calibration ID: 11840

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/18	P1030417.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1268 Peak 1	3023882				Ave		3023882.00						20.0			
PCB-1268 Peak 2	2846994				Ave		2846994.00						20.0			
PCB-1268 Peak 3	2785048				Ave		2785048.00						20.0			
PCB-1268 Peak 4	8652636				Ave		8652636.00						20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 23:50 Calibration End Date: 10/14/2013 23:50 Calibration ID: 11840

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/18	P1030417.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1					LVL 1				
PCB-1268 Peak 1	Ave	1511941					0.500				
PCB-1268 Peak 2	Ave	1423497					0.500				
PCB-1268 Peak 3	Ave	1392524					0.500				
PCB-1268 Peak 4	Ave	4326318					0.500				

Curve Type Legend:

Ave = Average by Height

Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030417.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030417.D
Lab Smp Id: IC 876035
Inj Date : 14-OCT-2013 23:50
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : IC 876035
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 01:47 Cal File: P1030421.D
Als bottle: 19 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1268.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

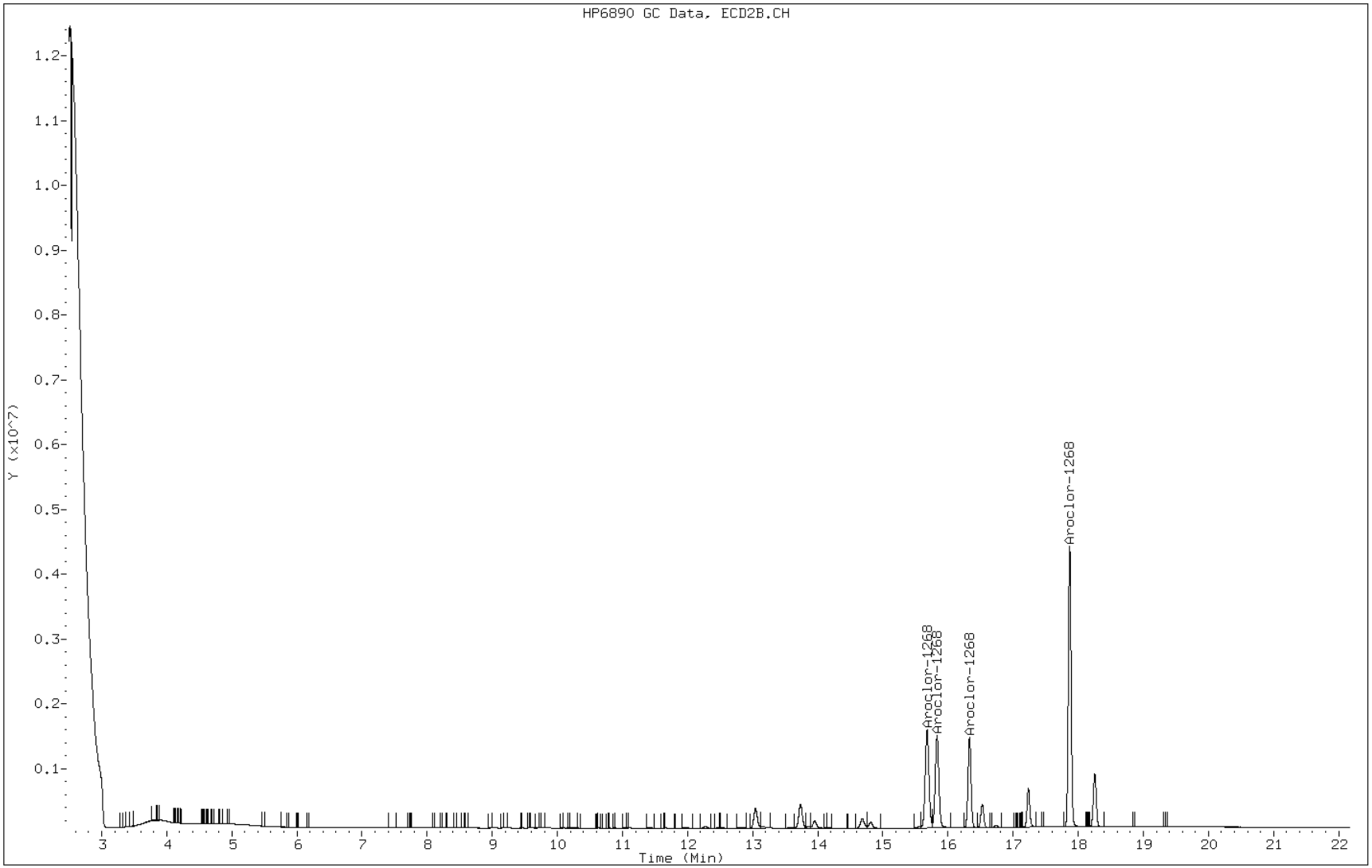
				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
10 Aroclor-1268					CAS #: 11100-14-4		
15.678	15.679	-0.001	1511941	0.50000	0.50000	0.00- 0.00	0.00
15.831	15.831	0.000	1423497	0.50000	0.50000	0.00- 0.00	0.00
16.330	16.329	0.001	1392524	0.50000	0.50000	0.00- 0.00	0.00
17.869	17.870	-0.001	4326318	0.50000	0.50000	0.00- 0.00	0.00
		Average of Peak Amounts =			0.50000		

Data File: P1030417.D

Date: 14-OCT-2013 23:50

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2013 00:19 Calibration End Date: 10/15/2013 03:14 Calibration ID: 11841

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/19	P1030418.D
Level 2	IC 180-86759/20	P1030419.D
Level 3	IC 180-86759/21	P1030420.D
Level 4	ICRT 180-86759/22	P1030421.D
Level 5	IC 180-86759/23	P1030422.D
Level 6	IC 180-86759/24	P1030423.D
Level 7	IC 180-86759/25	P1030424.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
PCB-1016 Peak 1	7.432	7.430	7.426	7.428	7.424	7.422	7.418				7.382 - 7.482	7.426
PCB-1016 Peak 2	8.093	8.085	8.068	8.068	8.057	8.047	8.040				8.043 - 8.143	8.065
PCB-1016 Peak 3	8.434	8.432	8.423	8.422	8.415	8.404	8.396				8.346 - 8.446	8.418
PCB-1016 Peak 4	8.977	8.977	8.971	8.971	8.968	8.965	8.960				8.910 - 9.010	8.970
PCB-1016 Peak 5	9.699	9.701	9.699	9.696	9.696	9.693	9.687				9.637 - 9.737	9.696
PCB-1260 Peak 1	11.414	11.412	11.409	11.407	11.405	11.405	11.399				11.349 - 11.449	11.407
PCB-1260 Peak 2	11.964	11.962	11.957	11.951	11.951	11.949	11.942				11.892 - 11.992	11.954
PCB-1260 Peak 3	12.845	12.842	12.835	12.829	12.830	12.828	12.818				12.768 - 12.868	12.832
PCB-1260 Peak 4	13.855	13.855	13.852	13.850	13.848	13.848	13.842				13.792 - 13.892	13.850
PCB-1260 Peak 5	14.687	14.682	14.677	14.672	14.672	14.669	14.664				14.614 - 14.714	14.675
Tetrachloro-m-xylene	6.403	6.401	6.397	6.399	6.395	6.393	6.389				6.339 - 6.439	6.397
DCB Decachlorobiphenyl (Surr)	18.253	18.252	18.252	18.247	18.250	18.250	18.247				18.197 - 18.297	18.250

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2013 00:19 Calibration End Date: 10/15/2013 03:14 Calibration ID: 11841

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/19	P1030418.D
Level 2	IC 180-86759/20	P1030419.D
Level 3	IC 180-86759/21	P1030420.D
Level 4	ICRT 180-86759/22	P1030421.D
Level 5	IC 180-86759/23	P1030422.D
Level 6	IC 180-86759/24	P1030423.D
Level 7	IC 180-86759/25	P1030424.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1016 Peak 1	1439200 1316378	1444180 1374438	1500310 1343179	1252524	Ave		1381458.32				6.2		20.0			
PCB-1016 Peak 2	1478400 1699203	1457680 1998811	1641550 2144349	1435726	Ave		1693674.18				16.5		20.0			
PCB-1016 Peak 3	779600 630649	706920 648405	720260 701305	617584	Ave		686388.964				8.4		20.0			
PCB-1016 Peak 4	923400 809529	886520 865048	902215 868529	767452	Ave		860384.714				6.3		20.0			
PCB-1016 Peak 5	752600 671259	751860 672744	754280 589933	526746	Ave		674203.143				13.2		20.0			
PCB-1260 Peak 1	1617400 1356783	1512220 1406231	1546935 1398905	1311826	Ave		1450042.75				7.6		20.0			
PCB-1260 Peak 2	1643600 1498848	1604460 1569175	1662075 1595178	1428312	Ave		1571663.93				5.2		20.0			
PCB-1260 Peak 3	1536300 1515010	1559260 1611068	1644210 1663360	1431730	Ave		1565848.25				5.2		20.0			
PCB-1260 Peak 4	1083400 1022499	1061800 1060134	1128840 1065605	992234	Ave		1059215.93				4.1		20.0			
PCB-1260 Peak 5	2269300 2216144	2197240 2360513	2362175 2392570	2075724	Ave		2267666.43				5.0		20.0			
Tetrachloro-m-xylene	42158000 45804260	41525200 52346450	47175700 55946325	40202160	Ave		46451156.4				12.7		20.0			
DCB Decachlorobiphenyl (Surr)	23716000 20474440	23046400 21624730	23571300 21719585	20017480	Ave		22024276.4				6.7		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2013 00:19 Calibration End Date: 10/15/2013 03:14 Calibration ID: 11841

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/19	P1030418.D
Level 2	IC 180-86759/20	P1030419.D
Level 3	IC 180-86759/21	P1030420.D
Level 4	ICRT 180-86759/22	P1030421.D
Level 5	IC 180-86759/23	P1030422.D
Level 6	IC 180-86759/24	P1030423.D
Level 7	IC 180-86759/25	P1030424.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1016 Peak 1	Ave	14392 2748875	72209 5372715	300062	626262	1316378	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1016 Peak 2	Ave	14784 3997622	72884 8577397	328310	717863	1699203	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1016 Peak 3	Ave	7796 1296809	35346 2805221	144052	308792	630649	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1016 Peak 4	Ave	9234 1730096	44326 3474116	180443	383726	809529	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1016 Peak 5	Ave	7526 1345488	37593 2359732	150856	263373	671259	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1260 Peak 1	Ave	16174 2812461	75611 5595619	309387	655913	1356783	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1260 Peak 2	Ave	16436 3138349	80223 6380712	332415	714156	1498848	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1260 Peak 3	Ave	15363 3222135	77963 6653441	328842	715865	1515010	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1260 Peak 4	Ave	10834 2120268	53090 4262418	225768	496117	1022499	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1260 Peak 5	Ave	22693 4721025	109862 9570278	472435	1037862	2216144	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
Tetrachloro-m-xylene	Ave	21079 5234645	103813 11189265	471757	1005054	2290213	0.000500 0.100	0.00250 0.200	0.0100	0.0250	0.0500
DCB Decachlorobiphenyl (Surr)	Ave	11858 2162473	57616 4343917	235713	500437	1023722	0.000500 0.100	0.00250 0.200	0.0100	0.0250	0.0500

Curve Type Legend:
Ave = Average by Height

Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030418.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030418.D
Lab Smp Id: IC 967300
Inj Date : 15-OCT-2013 00:19
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : IC 967300
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 01:47 Cal File: P1030421.D
Als bottle: 96 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
$ 2 Tetrachloro-m-xylene						CAS #: 877-09-8	
6.403	6.389	0.014	21079	0.00050	0.00045379		
4 Aroclor-1016						CAS #: 12674-11-2	
7.432	7.432	0.000	14392	0.01000	0.010418	0.00- 0.00	0.00(aM)
8.093	8.093	0.000	14784	0.01000	0.0087290	100.00- 100.00	0.00
8.434	8.395	0.039	7796	0.01000	0.011358	223.51- 223.51	0.00
8.977	8.959	0.018	9234	0.01000	0.010732	223.51- 223.51	0.00
9.699	9.687	0.012	7526	0.01000	0.011163	317.56- 317.56	0.00
Average of Peak Amounts =					0.01048		
8 Aroclor-1260						CAS #: 11096-82-5	
11.414	11.399	0.015	16174	0.01000	0.011154	0.00- 0.00	0.00(a)
11.964	11.942	0.022	16436	0.01000	0.010458	115.86- 115.86	0.00
12.844	12.818	0.026	15363	0.01000	0.0098113	136.91- 136.91	0.00
13.854	13.842	0.012	10834	0.01000	0.010228	140.00- 140.00	0.00
14.687	14.664	0.023	22693	0.01000	0.010007	128.33- 128.33	0.00
Average of Peak Amounts =					0.01033		
$ 11 DCB Decachlorobiphenyl (Surr)						CAS #: 2051-24-3	
18.253	18.246	0.007	11858	0.00050	0.00053840		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030418.D
Report Date: 15-Oct-2013 10:05

QC Flag Legend

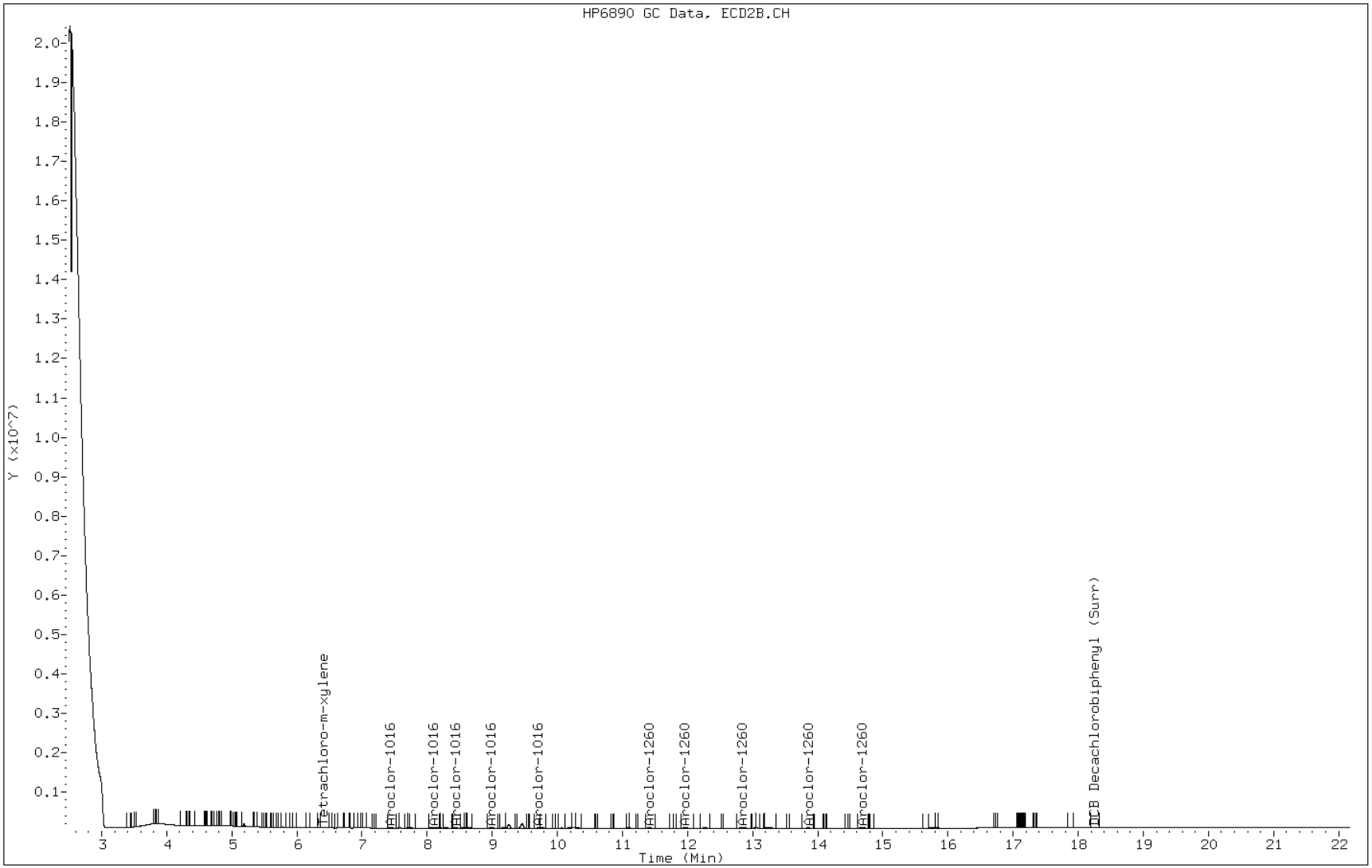
M - Compound response manually integrated.

Data File: P1030418.D

Date: 15-OCT-2013 00:19

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360

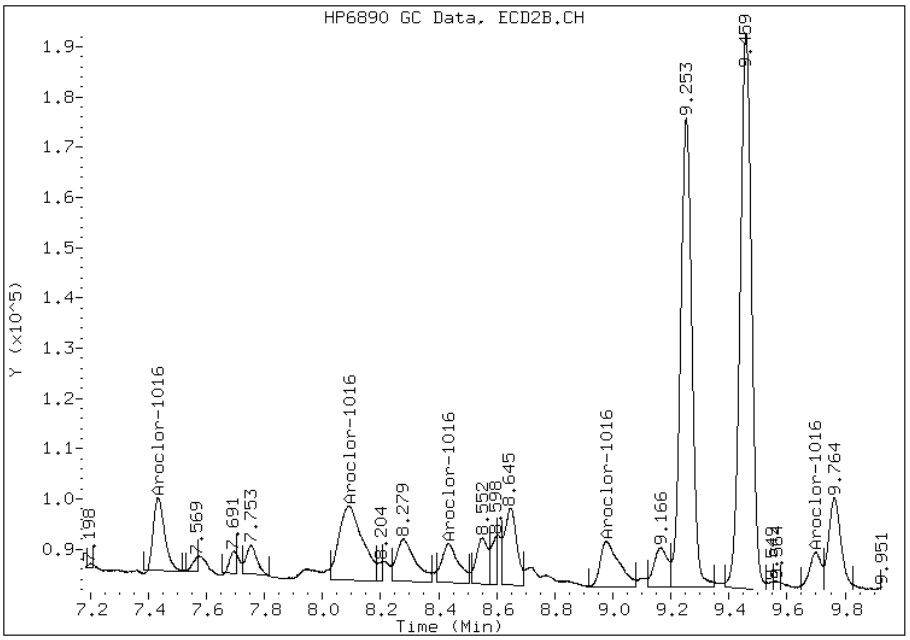


Manual Integration Report

Data File: P1030418.D
Inj. Date and Time: 15-OCT-2013 00:19
Instrument ID: gc8.i
Client ID:
Compound: 4 Aroclor-1016
CAS #: 12674-11-2
Report Date: 10/15/2013

Processing Integration Results

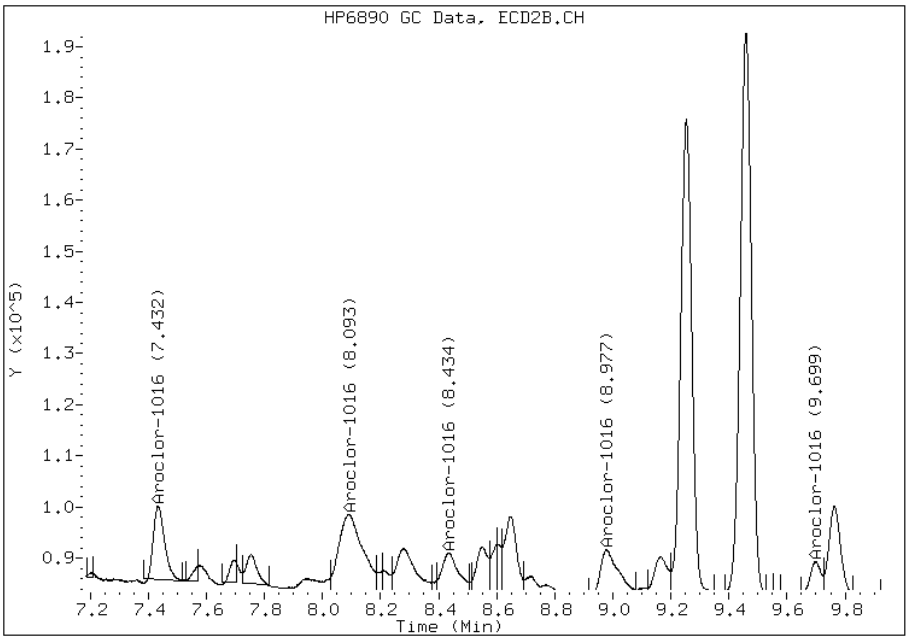
Not Detected



Manual Integration Results

RT	Response	Conc
7.43	14392*	0.01

Final Conc		0.01



Manually Integrated By: guptaa
Modification Date: 15-Oct-2013 09:10
Manual Integration Reason: Poor Chromatography

Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030419.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030419.D
Lab Smp Id: IC 967301
Inj Date : 15-OCT-2013 00:48
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : IC 967301
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 00:19 Cal File: P1030418.D
Als bottle: 21 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 2 Tetrachloro-m-xylene					CAS #: 877-09-8		
6.400	6.389	0.011	103813	0.00250	0.0022349		
4 Aroclor-1016					CAS #: 12674-11-2		
7.429	7.432	-0.003	72209	0.05000	0.052270	0.00- 0.00	0.00(aM)
8.084	8.093	-0.009	72884	0.05000	0.043033	100.00- 100.00	0.00
8.432	8.395	0.037	35346	0.05000	0.051496	223.51- 223.51	0.00
8.977	8.959	0.018	44326	0.05000	0.051519	223.51- 223.51	0.00
9.700	9.687	0.013	37593	0.05000	0.055759	317.56- 317.56	0.00
Average of Peak Amounts =					0.05082		
8 Aroclor-1260					CAS #: 11096-82-5		
11.412	11.399	0.013	75611	0.05000	0.052144	0.00- 0.00	0.00(a)
11.961	11.942	0.019	80223	0.05000	0.051043	115.86- 115.86	0.00
12.841	12.818	0.023	77963	0.05000	0.049790	136.91- 136.91	0.00
13.854	13.842	0.012	53090	0.05000	0.050122	140.00- 140.00	0.00
14.681	14.664	0.017	109862	0.05000	0.048447	128.33- 128.33	0.00
Average of Peak Amounts =					0.05031		
$ 11 DCB Decachlorobiphenyl (Surr)					CAS #: 2051-24-3		
18.251	18.246	0.005	57616	0.00250	0.0026160		

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030419.D
Report Date: 15-Oct-2013 10:05

QC Flag Legend

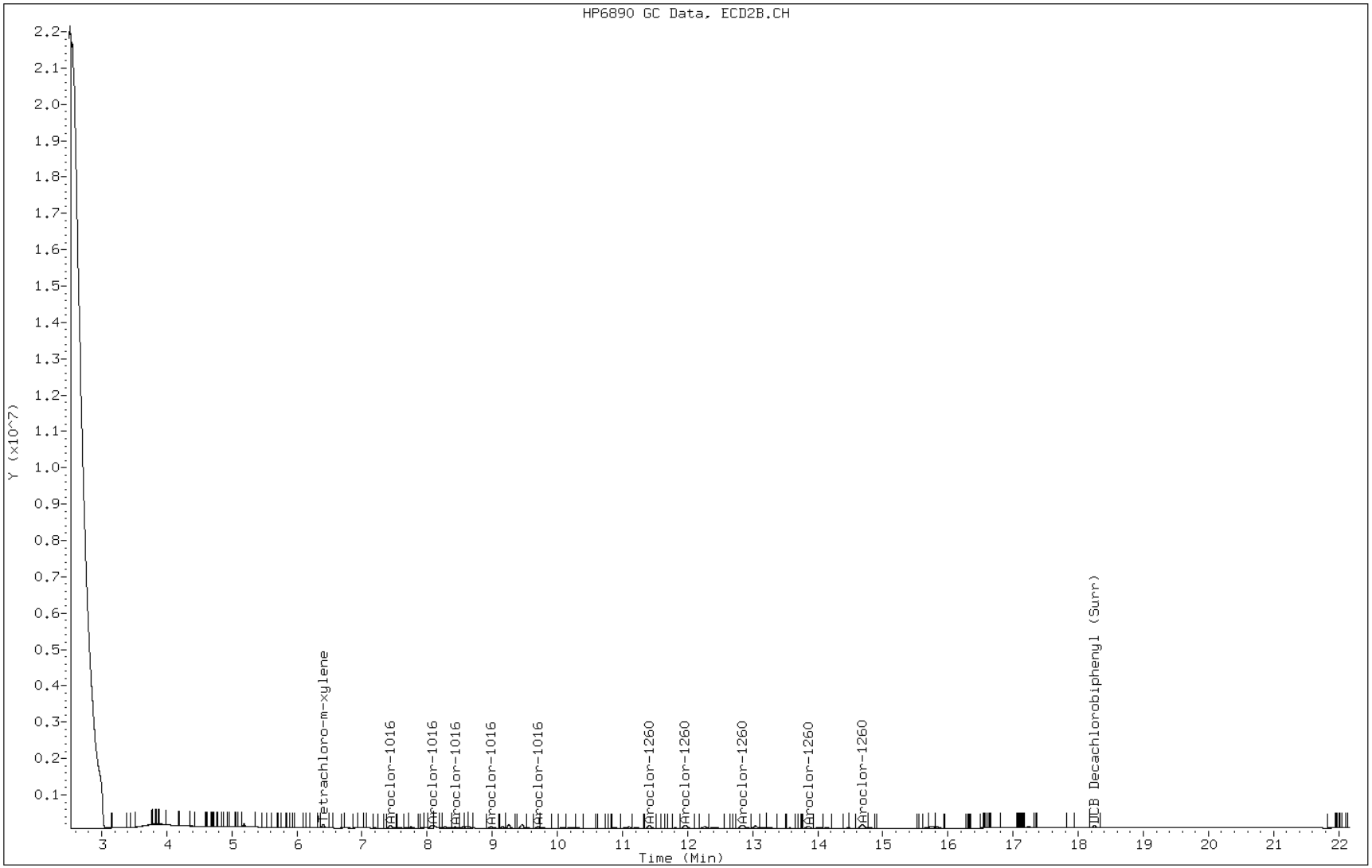
M - Compound response manually integrated.

Data File: P1030419.D

Date: 15-OCT-2013 00:48

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



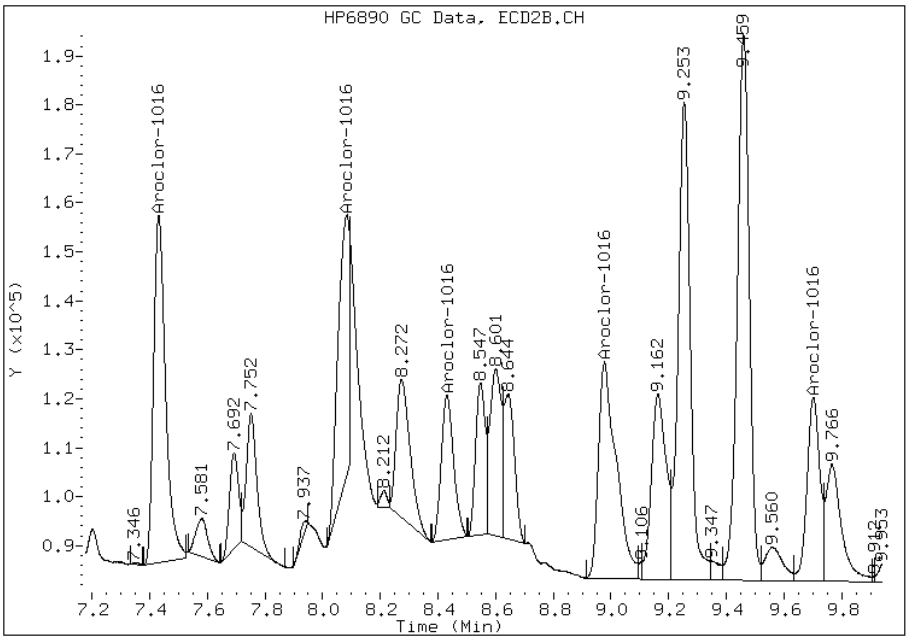
Manual Integration Report

Data File: P1030419.D
Inj. Date and Time: 15-OCT-2013 00:48
Instrument ID: gc8.i
Client ID:
Compound: 4 Aroclor-1016
CAS #: 12674-11-2
Report Date: 10/15/2013

Processing Integration Results

RT	Response	Conc
7.43	70864*	0.05
8.08	53354*	0.03
8.43	29544*	0.05
8.98	44326	0.05
9.70	37593	0.06

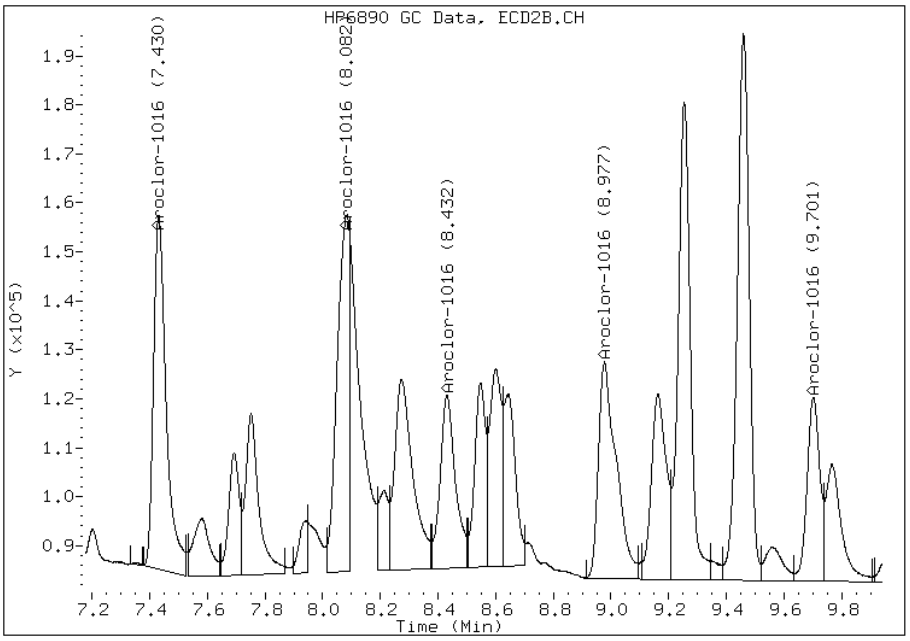
Final Conc		0.05



Manual Integration Results

RT	Response	Conc
7.43	72209*	0.05
8.08	72884*	0.04
8.43	35346*	0.05
8.98	44326	0.05
9.70	37593	0.06

Final Conc		0.05



Manually Integrated By: guptaa
Modification Date: 15-Oct-2013 09:11
Manual Integration Reason: Poor Chromatography

Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030420.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030420.D
Lab Smp Id: IC 967302
Inj Date : 15-OCT-2013 01:17
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : IC 967302
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 00:48 Cal File: P1030419.D
Als bottle: 22 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
$ 2 Tetrachloro-m-xylene					CAS #: 877-09-8		
6.396	6.389	0.007	471757	0.01000	0.010156		
4 Aroclor-1016					CAS #: 12674-11-2		
7.425	7.432	-0.007	300062	0.20000	0.21721	0.00- 0.00	0.00(a)
8.068	8.093	-0.025	328310	0.20000	0.19384	100.00- 100.00	0.00
8.423	8.395	0.028	144052	0.20000	0.20987	223.51- 223.51	0.00
8.970	8.959	0.011	180443	0.20000	0.20972	223.51- 223.51	0.00
9.699	9.687	0.012	150856	0.20000	0.22375	317.56- 317.56	0.00
Average of Peak Amounts =					0.21088		
8 Aroclor-1260					CAS #: 11096-82-5		
11.409	11.399	0.010	309387	0.20000	0.21336	0.00- 0.00	0.00(a)
11.956	11.942	0.014	332415	0.20000	0.21150	115.86- 115.86	0.00
12.834	12.818	0.016	328842	0.20000	0.21001	136.91- 136.91	0.00
13.852	13.842	0.010	225768	0.20000	0.21315	140.00- 140.00	0.00
14.677	14.664	0.013	472435	0.20000	0.20834	128.33- 128.33	0.00
Average of Peak Amounts =					0.21127		
$ 11 DCB Decachlorobiphenyl (Surr)					CAS #: 2051-24-3		
18.251	18.246	0.005	235713	0.01000	0.010702		

QC Flag Legend

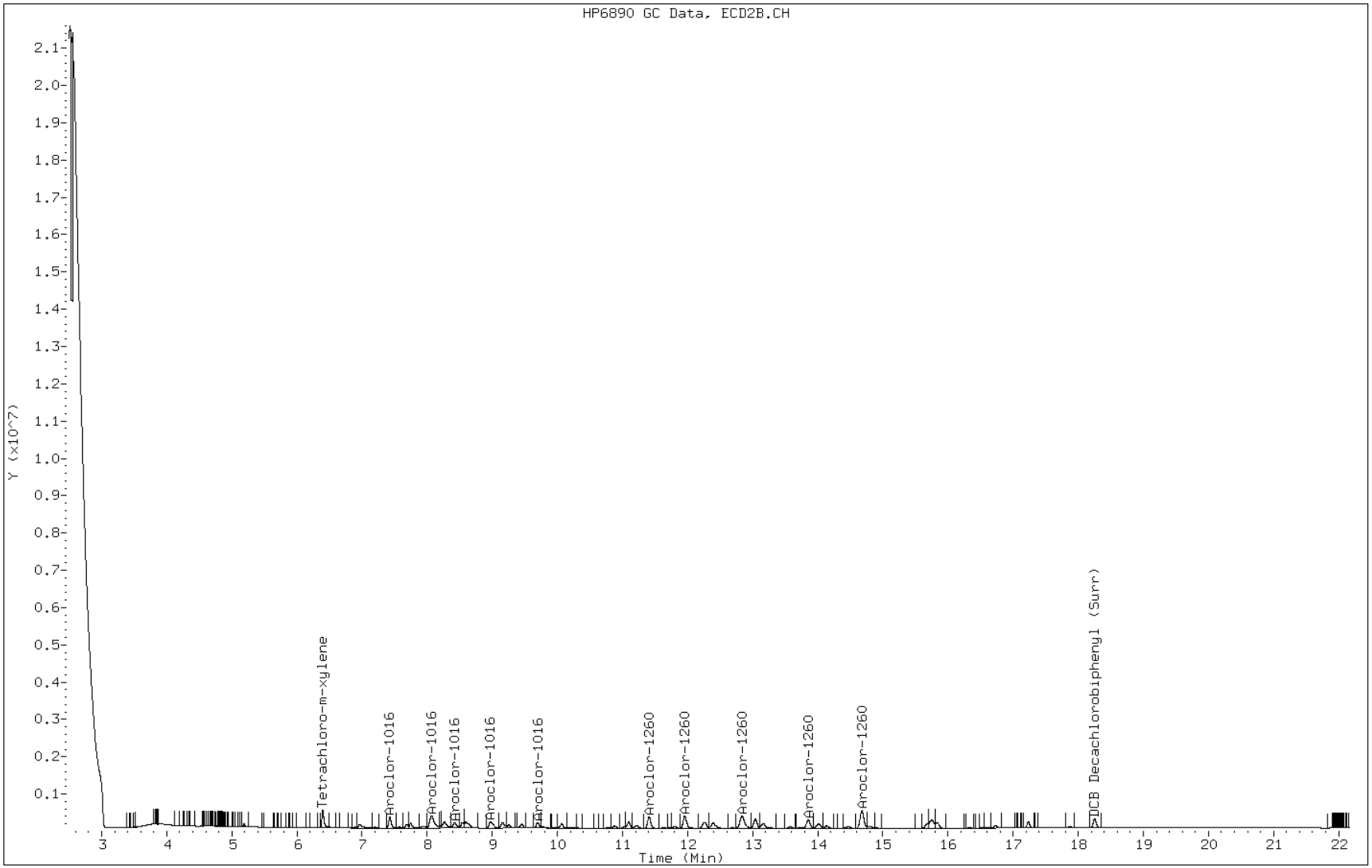
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: P1030420.D

Date: 15-OCT-2013 01:17

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030421.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030421.D
Lab Smp Id: ICRT-967303
Inj Date : 15-OCT-2013 01:47
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : ICRT-967303
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 01:17 Cal File: P1030420.D
Als bottle: 23 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 2 Tetrachloro-m-xylene					CAS #: 877-09-8		
6.399	6.389	0.010	1005054	0.02500	0.021637		
4 Aroclor-1016					CAS #: 12674-11-2		
7.427	7.432	-0.005	626262	0.50000	0.45333	0.00- 0.00	0.00(a)
8.067	8.093	-0.026	717863	0.50000	0.42385	100.00- 100.00	0.00
8.421	8.395	0.026	308792	0.50000	0.44988	223.51- 223.51	0.00
8.971	8.959	0.012	383726	0.50000	0.44599	223.51- 223.51	0.00
9.696	9.687	0.009	263373	0.50000	0.39064	317.56- 317.56	0.00
Average of Peak Amounts =					0.43274		
8 Aroclor-1260					CAS #: 11096-82-5		
11.406	11.399	0.007	655913	0.50000	0.45234	0.00- 0.00	0.00(a)
11.951	11.942	0.009	714156	0.50000	0.45439	115.86- 115.86	0.00
12.829	12.818	0.011	715865	0.50000	0.45717	136.91- 136.91	0.00
13.850	13.842	0.008	496117	0.50000	0.46838	140.00- 140.00	0.00
14.671	14.664	0.007	1037862	0.50000	0.45768	128.33- 128.33	0.00
Average of Peak Amounts =					0.45799		
$ 11 DCB Decachlorobiphenyl (Surr)					CAS #: 2051-24-3		
18.246	18.246	0.000	500437	0.02500	0.022722		

QC Flag Legend

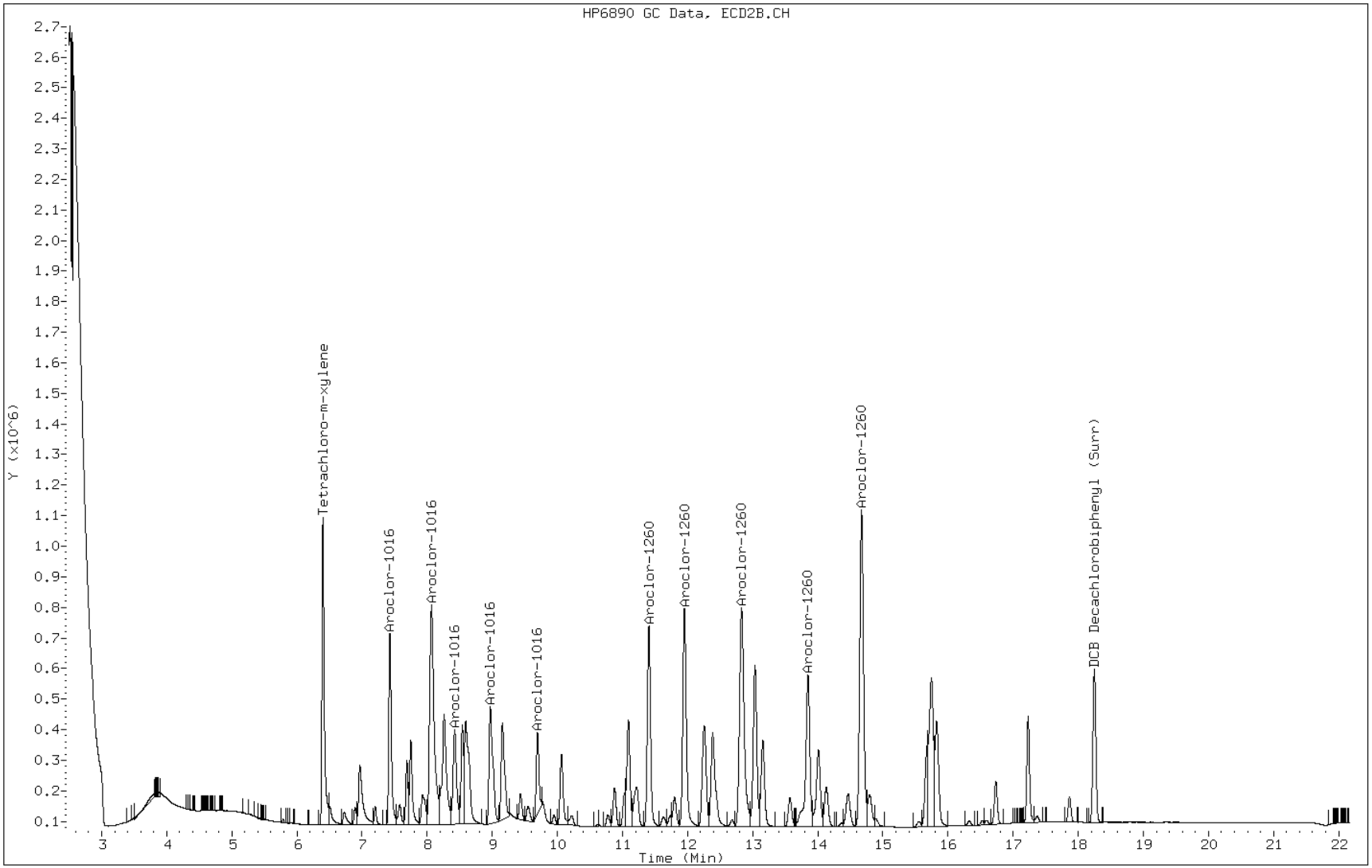
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: P1030421.D

Date: 15-OCT-2013 01:47

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030422.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030422.D
Lab Smp Id: IC 967305
Inj Date : 15-OCT-2013 02:16
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : IC 967305
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 01:47 Cal File: P1030421.D
Als bottle: 24 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
$ 2 Tetrachloro-m-xylene					CAS #: 877-09-8		
6.395	6.389	0.006	2290213	0.05000	0.049304		
4 Aroclor-1016					CAS #: 12674-11-2		
7.423	7.432	-0.009	1316378	1.00000	0.95289	0.00- 0.00	0.00(a)
8.057	8.093	-0.036	1699203	1.00000	1.0033	100.00- 100.00	0.00
8.415	8.395	0.020	630649	1.00000	0.91879	223.51- 223.51	0.00
8.967	8.959	0.008	809529	1.00000	0.94089	223.51- 223.51	0.00
9.696	9.687	0.009	671259	1.00000	0.99563	317.56- 317.56	0.00
Average of Peak Amounts =					0.96230		
8 Aroclor-1260					CAS #: 11096-82-5		
11.405	11.399	0.006	1356783	1.00000	0.93568	0.00- 0.00	0.00(a)
11.951	11.942	0.009	1498848	1.00000	0.95367	115.86- 115.86	0.00
12.830	12.818	0.012	1515010	1.00000	0.96753	136.91- 136.91	0.00
13.847	13.842	0.005	1022499	1.00000	0.96534	140.00- 140.00	0.00
14.672	14.664	0.008	2216144	1.00000	0.97728	128.33- 128.33	0.00
Average of Peak Amounts =					0.95990		
$ 11 DCB Decachlorobiphenyl (Surr)					CAS #: 2051-24-3		
18.250	18.246	0.004	1023722	0.05000	0.046482		

QC Flag Legend

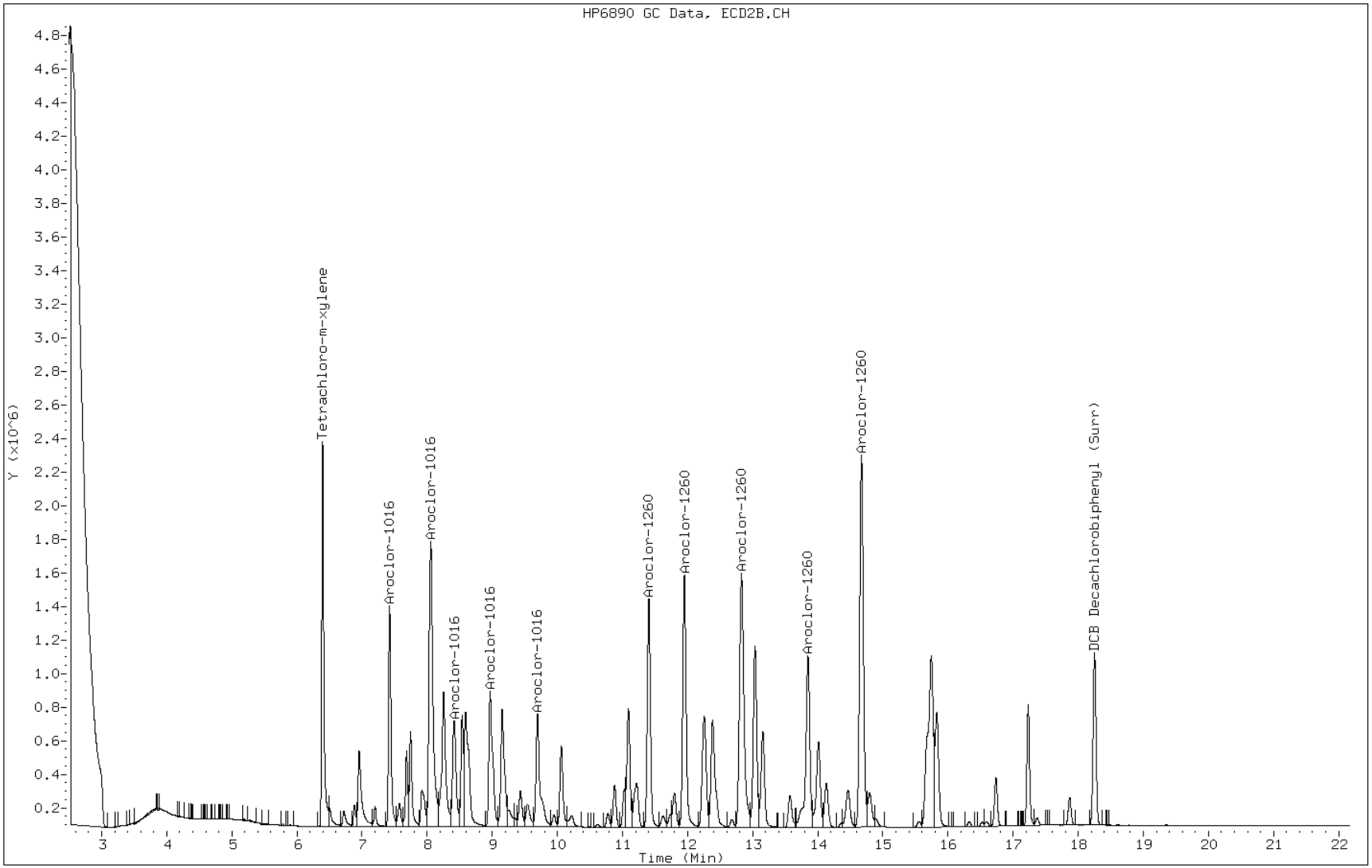
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: P1030422.D

Date: 15-OCT-2013 02:16

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030423.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030423.D
Lab Smp Id: IC 967315
Inj Date : 15-OCT-2013 02:45
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : IC 967315
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 02:16 Cal File: P1030422.D
Als bottle: 25 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

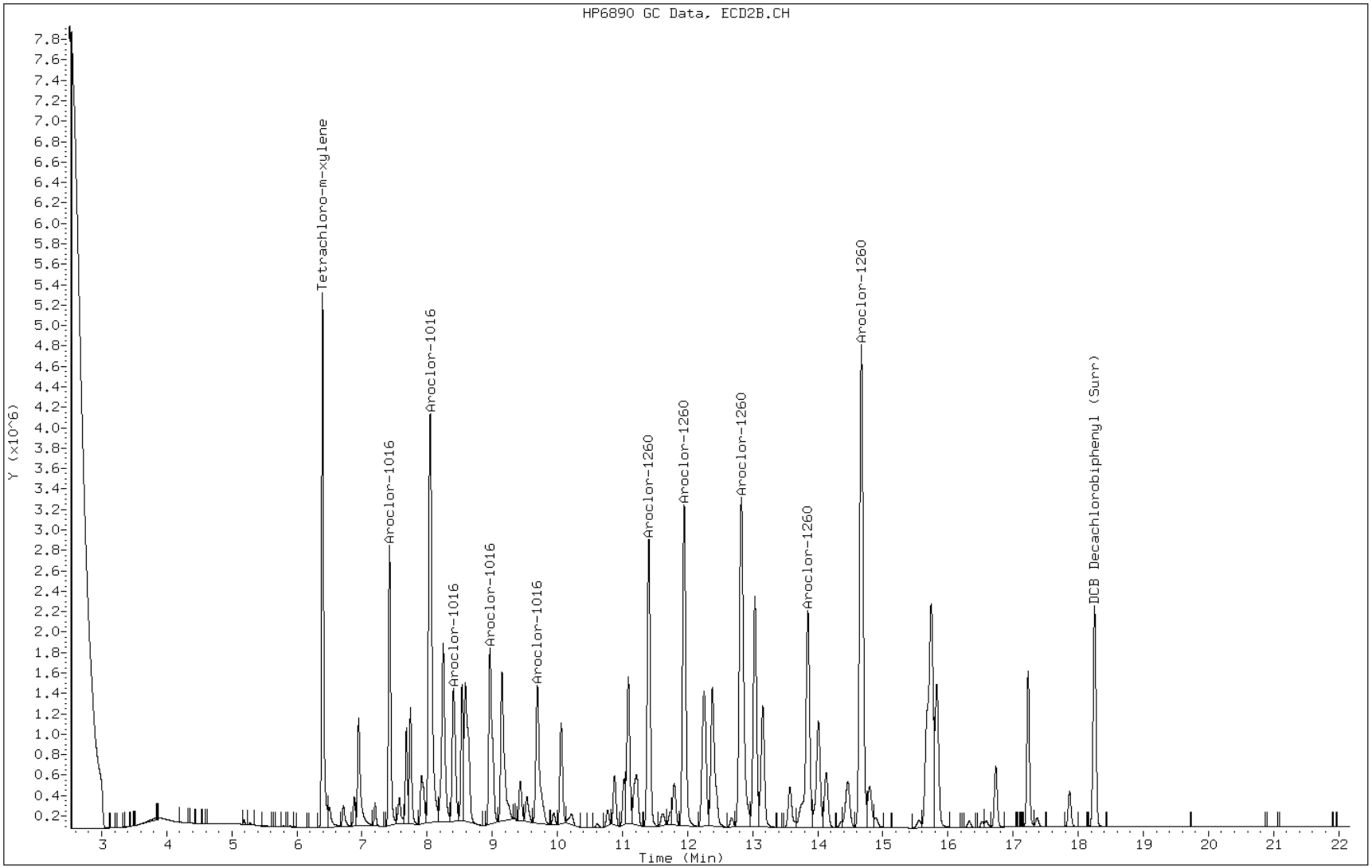
				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 2 Tetrachloro-m-xylene						CAS #: 877-09-8	
6.393	6.389	0.004	5234645	0.10000	0.11269		
4 Aroclor-1016						CAS #: 12674-11-2	
7.421	7.432	-0.011	2748875	2.00000	1.9898	0.00- 0.00	0.00
8.046	8.093	-0.047	3997622	2.00000	2.3603	100.00- 100.00	0.00
8.404	8.395	0.009	1296809	2.00000	1.8893	223.51- 223.51	0.00
8.965	8.959	0.006	1730096	2.00000	2.0108	223.51- 223.51	0.00
9.693	9.687	0.006	1345488	2.00000	1.9957	317.56- 317.56	0.00
Average of Peak Amounts =					2.04918		
8 Aroclor-1260						CAS #: 11096-82-5	
11.405	11.399	0.006	2812461	2.00000	1.9396	0.00- 0.00	0.00
11.949	11.942	0.007	3138349	2.00000	1.9968	115.86- 115.86	0.00
12.827	12.818	0.009	3222135	2.00000	2.0578	136.91- 136.91	0.00
13.848	13.842	0.006	2120268	2.00000	2.0017	140.00- 140.00	0.00
14.669	14.664	0.005	4721025	2.00000	2.0819	128.33- 128.33	0.00
Average of Peak Amounts =					2.01556		
$ 11 DCB Decachlorobiphenyl (Surr)						CAS #: 2051-24-3	
18.250	18.246	0.004	2162473	0.10000	0.098186		

Data File: P1030423.D

Date: 15-OCT-2013 02:45

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030424.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030424.D
Lab Smp Id: IC 967323
Inj Date : 15-OCT-2013 03:14
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : IC 967323
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 02:45 Cal File: P1030423.D
Als bottle: 26 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

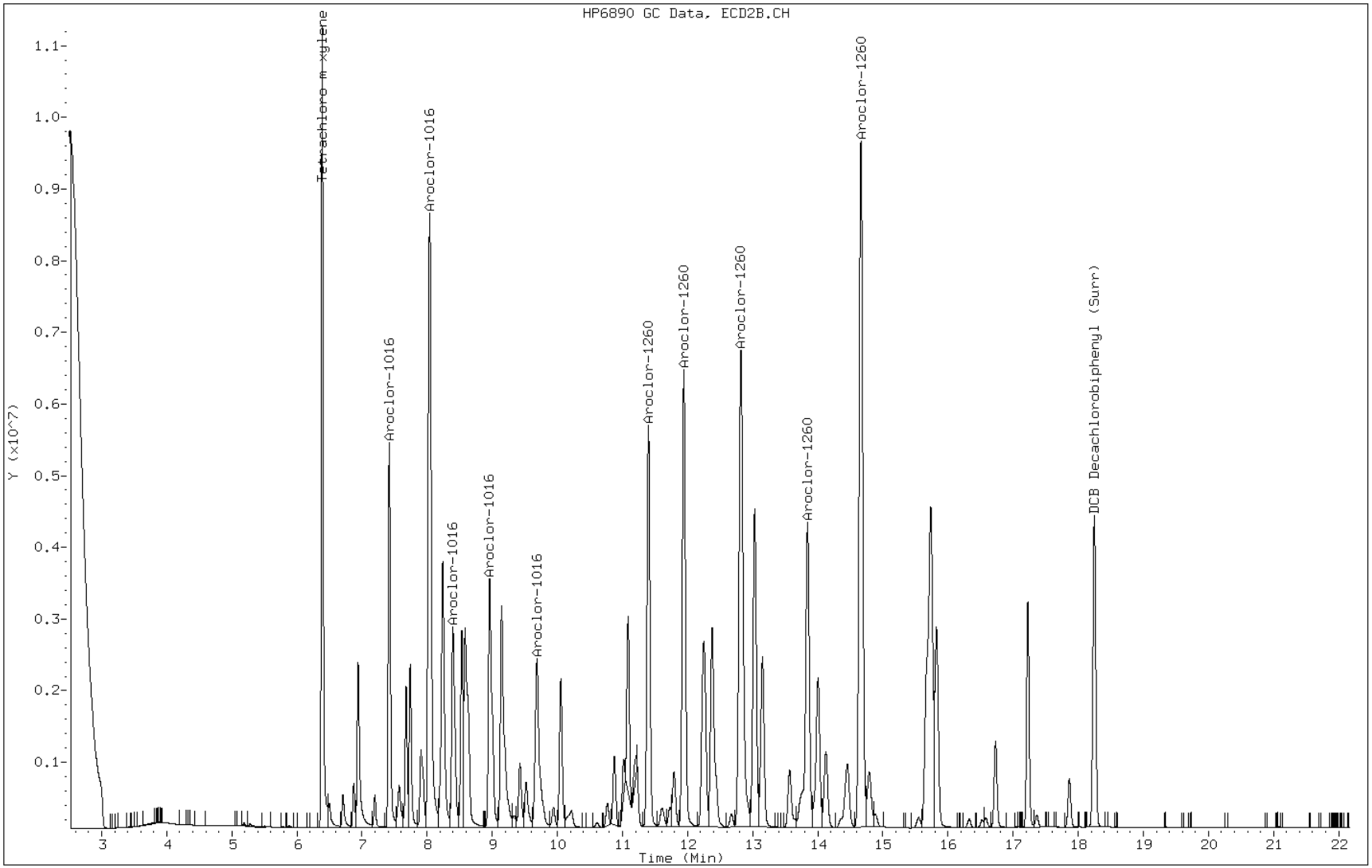
				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 2 Tetrachloro-m-xylene					CAS #: 877-09-8		
6.389	6.389	0.000	11189265	0.20000	0.24088		
4 Aroclor-1016					CAS #: 12674-11-2		
7.418	7.432	-0.014	5372715	4.00000	3.8892	0.00- 0.00	0.00
8.039	8.093	-0.054	8577397	4.00000	5.0644	100.00- 100.00	0.00
8.395	8.395	0.000	2805221	4.00000	4.0869	223.51- 223.51	0.00
8.959	8.959	0.000	3474116	4.00000	4.0379	223.51- 223.51	0.00
9.687	9.687	0.000	2359732	4.00000	3.5000	317.56- 317.56	0.00
Average of Peak Amounts =					4.11568		
8 Aroclor-1260					CAS #: 11096-82-5		
11.399	11.399	0.000	5595619	4.00000	3.8589	0.00- 0.00	0.00
11.942	11.942	0.000	6380712	4.00000	4.0598	115.86- 115.86	0.00
12.818	12.818	0.000	6653441	4.00000	4.2491	136.91- 136.91	0.00
13.842	13.842	0.000	4262418	4.00000	4.0241	140.00- 140.00	0.00
14.664	14.664	0.000	9570278	4.00000	4.2203	128.33- 128.33	0.00
Average of Peak Amounts =					4.08244		
$ 11 DCB Decachlorobiphenyl (Surr)					CAS #: 2051-24-3		
18.246	18.246	0.000	4343917	0.20000	0.19723		

Data File: P1030424.D

Date: 15-OCT-2013 03:14

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/26 Calibration Date: 10/15/2013 03:43

Instrument ID: GC8 Calib Start Date: 10/14/2013 15:33

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/14/2013 17:30

Lab File ID: P1030425.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1221 Peak 1	Ave	220386	266874		0.605	0.500	21.1*	20.0
PCB-1221 Peak 2	Ave	292056	312948		0.536	0.500	7.2	20.0
PCB-1221 Peak 3	Ave	547470	651156		0.595	0.500	18.9	20.0
PCB-1254 Peak 1	Ave	1355280	1579018		0.583	0.500	16.5	20.0
PCB-1254 Peak 2	Ave	1212607	1405658		0.580	0.500	15.9	20.0
PCB-1254 Peak 3	Ave	436110	519832		0.596	0.500	19.2	20.0
PCB-1254 Peak 4	Ave	737603	805546		0.546	0.500	9.2	20.0
PCB-1254 Peak 5	Ave	669117	741508		0.554	0.500	10.8	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/26 Calibration Date: 10/15/2013 03:43

Instrument ID: GC8 Calib Start Date: 10/14/2013 15:33

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/14/2013 17:30

Lab File ID: P1030425.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1221 Peak 1	5.87	5.82	5.92
PCB-1221 Peak 2	6.71	6.66	6.76
PCB-1221 Peak 3	6.95	6.90	7.00
PCB-1254 Peak 1	9.69	9.65	9.75
PCB-1254 Peak 2	10.05	10.01	10.11
PCB-1254 Peak 3	10.61	10.57	10.67
PCB-1254 Peak 4	11.40	11.36	11.46
PCB-1254 Peak 5	11.95	11.91	12.01

Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030425.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030425.D
Lab Smp Id: ICV 867344
Inj Date : 15-OCT-2013 03:43
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : ICV 867344
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 03:14 Cal File: P1030424.D
Als bottle: 27 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 2154.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
1 Aroclor-1221					CAS #: 11104-28-2		
5.870	5.870	0.000	133437	0.50000	0.60547	0.00- 0.00	0.00(aM)
6.711	6.711	0.000	156474	0.50000	0.53577	136.57- 136.57	0.00
6.952	6.952	0.000	325578	0.50000	0.59470	86.04- 86.04	0.00
		Average of Peak Amounts =			0.57865		
7 Aroclor-1254					CAS #: 11097-69-1		
9.689	9.700	-0.011	789509	0.50000	0.58254	0.00- 0.00	0.00(a)
10.052	10.063	-0.011	702829	0.50000	0.57960	112.23- 112.23	0.00
10.608	10.619	-0.011	259916	0.50000	0.59599	97.40- 97.40	0.00
11.395	11.408	-0.013	402773	0.50000	0.54606	71.09- 71.09	0.00
11.947	11.955	-0.008	370754	0.50000	0.55409	85.01- 85.01	0.00
		Average of Peak Amounts =			0.57166		

QC Flag Legend

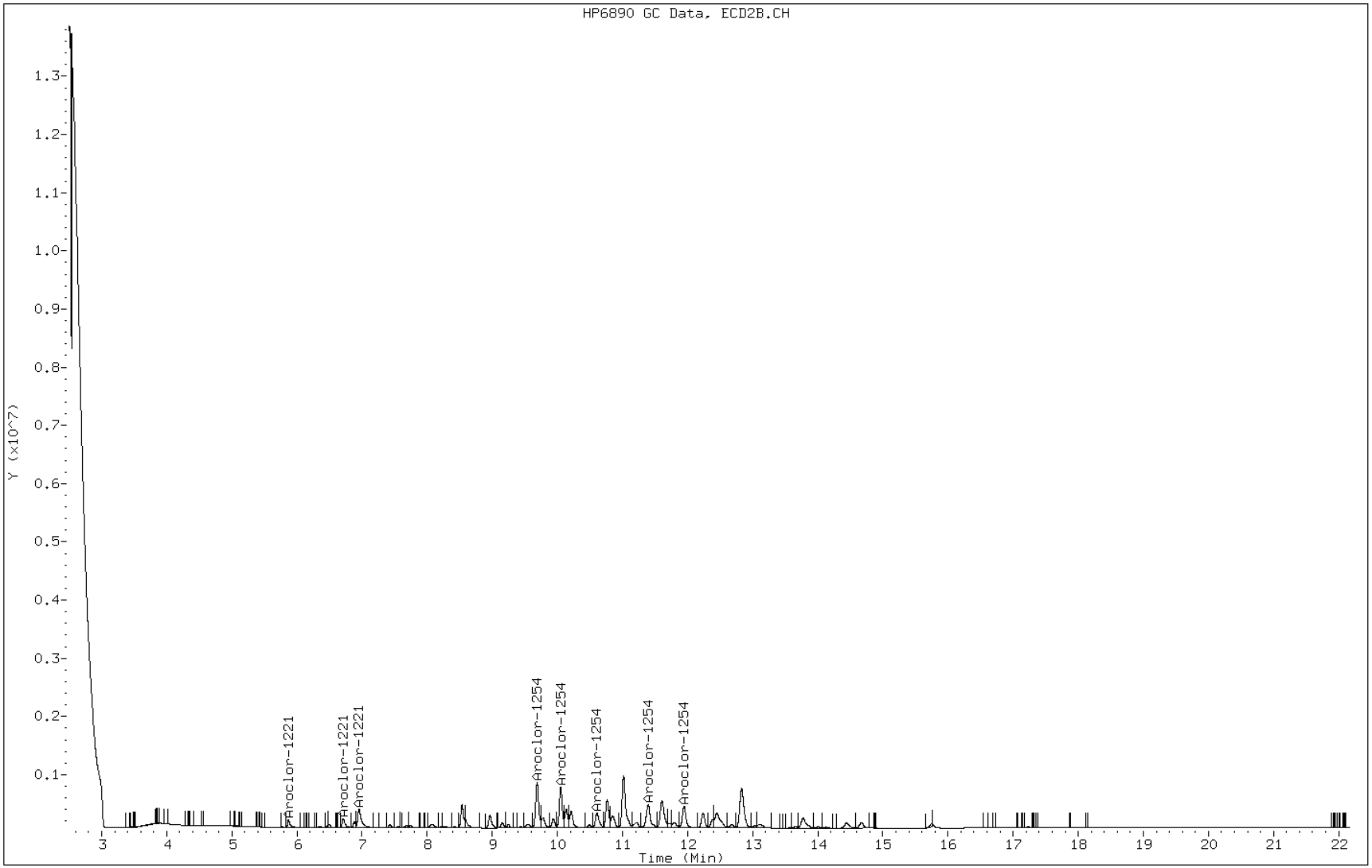
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: P1030425.D

Date: 15-OCT-2013 03:43

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/27 Calibration Date: 10/15/2013 04:13

Instrument ID: GC8 Calib Start Date: 10/14/2013 22:52

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/14/2013 22:52

Lab File ID: P1030426.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1232 Peak 1	Ave	158486	175950		0.555	0.500	11.0	20.0
PCB-1232 Peak 2	Ave	117102	129044		0.551	0.500	10.2	20.0
PCB-1232 Peak 3	Ave	120258	116924		0.486	0.500	-2.8	20.0
PCB-1232 Peak 4	Ave	314476	320312		0.509	0.500	1.9	20.0
PCB-1232 Peak 5	Ave	273866	300808		0.549	0.500	9.8	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/27 Calibration Date: 10/15/2013 04:13

Instrument ID: GC8 Calib Start Date: 10/14/2013 22:52

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/14/2013 22:52

Lab File ID: P1030426.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1232 Peak 1	6.72	6.68	6.78
PCB-1232 Peak 2	6.89	6.85	6.95
PCB-1232 Peak 3	8.21	8.17	8.27
PCB-1232 Peak 4	8.54	8.50	8.60
PCB-1232 Peak 5	9.69	9.65	9.75

Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030426.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030426.D
Lab Smp Id: ICV 867345
Inj Date : 15-OCT-2013 04:13
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : ICV 867345
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 03:14 Cal File: P1030424.D
Als bottle: 28 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1232.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
3 Aroclor-1232					CAS #: 11141-16-5		
6.719	6.727	-0.008	87975	0.50000	0.55510	0.00- 0.00	0.00(a)
6.885	6.895	-0.010	64522	0.50000	0.55099	166.26- 166.26	0.00
8.206	8.217	-0.011	58462	0.50000	0.48614	85.99- 85.99	0.00
8.538	8.548	-0.010	160156	0.50000	0.50928	94.18- 94.18	0.00
9.691	9.702	-0.011	150404	0.50000	0.54919	0.00- 0.00	0.00
		Average of Peak Amounts =			0.53014		

QC Flag Legend

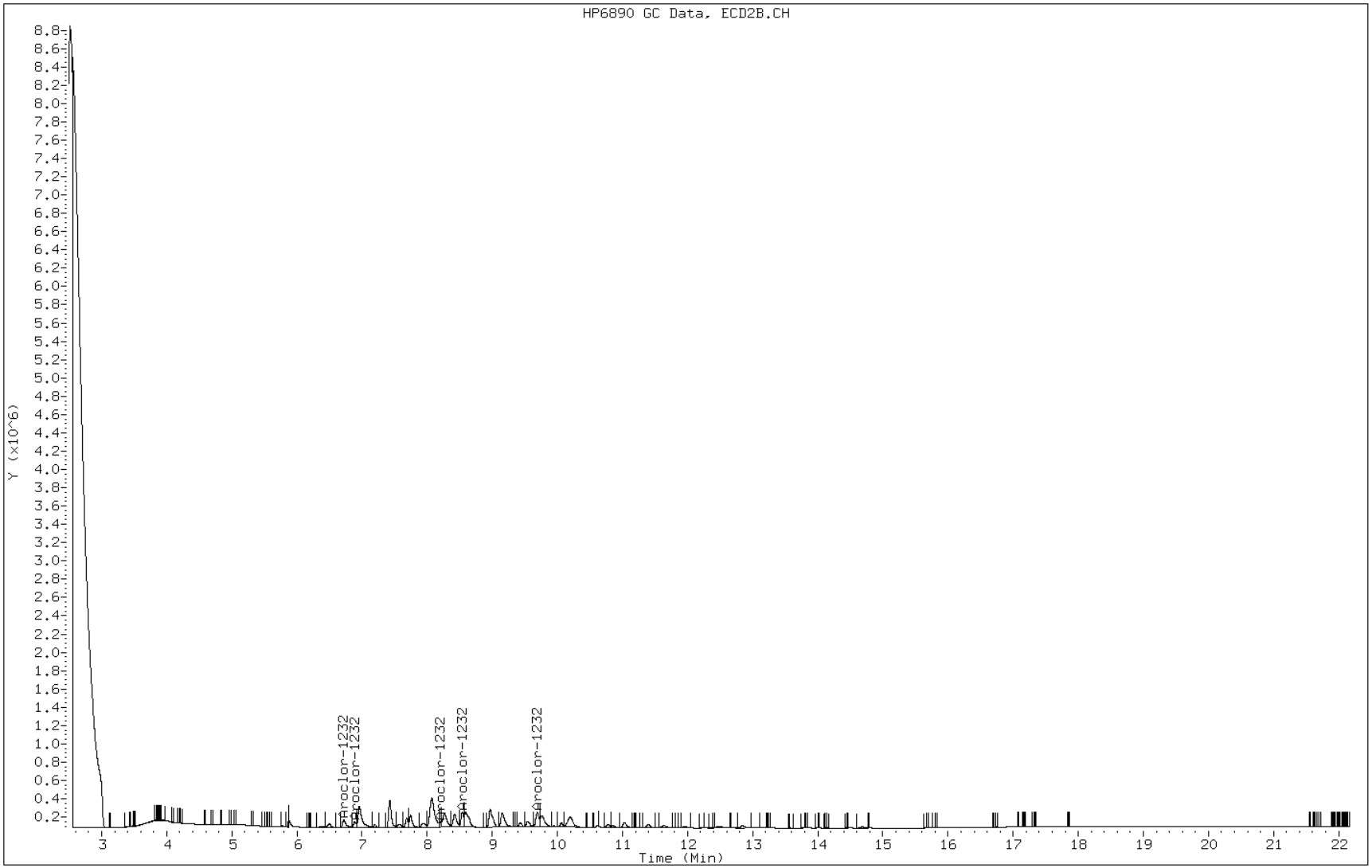
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: P1030426.D

Date: 15-OCT-2013 04:13

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/29 Calibration Date: 10/15/2013 05:11

Instrument ID: GC8 Calib Start Date: 10/14/2013 20:25

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/14/2013 22:22

Lab File ID: P1030428.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1248 Peak 1	Ave	585038	550196		0.470	0.500	-6.0	20.0
PCB-1248 Peak 2	Ave	1065883	978404		0.459	0.500	-8.2	20.0
PCB-1248 Peak 3	Ave	898536	842066		0.469	0.500	-6.3	20.0
PCB-1248 Peak 4	Ave	723485	668614		0.462	0.500	-7.6	20.0
PCB-1248 Peak 5	Ave	505531	487726		0.482	0.500	-3.5	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/29 Calibration Date: 10/15/2013 05:11

Instrument ID: GC8 Calib Start Date: 10/14/2013 20:25

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/14/2013 22:22

Lab File ID: P1030428.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1248 Peak 1	8.07	8.02	8.12
PCB-1248 Peak 2	8.97	8.92	9.02
PCB-1248 Peak 3	9.15	9.10	9.20
PCB-1248 Peak 4	10.19	10.18	10.28
PCB-1248 Peak 5	11.03	10.98	11.08

Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030428.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030428.D
Lab Smp Id: ICV 867348
Inj Date : 15-OCT-2013 05:11
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : ICV 867348
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 03:14 Cal File: P1030424.D
Als bottle: 30 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1248.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
6 Aroclor-1248					CAS #: 12672-29-6		
8.074	8.067	0.007	275098	0.50000	0.47022	0.00- 0.00	0.00(a)
8.966	8.968	-0.002	489202	0.50000	0.45896	134.57- 134.57	0.00
9.151	9.154	-0.003	421033	0.50000	0.46858	83.67- 83.67	0.00
10.186	10.233	-0.047	334307	0.50000	0.46208	63.86- 63.86	0.00
11.027	11.031	-0.004	243863	0.50000	0.48239	148.08- 148.08	0.00
		Average of Peak Amounts =			0.46845		

QC Flag Legend

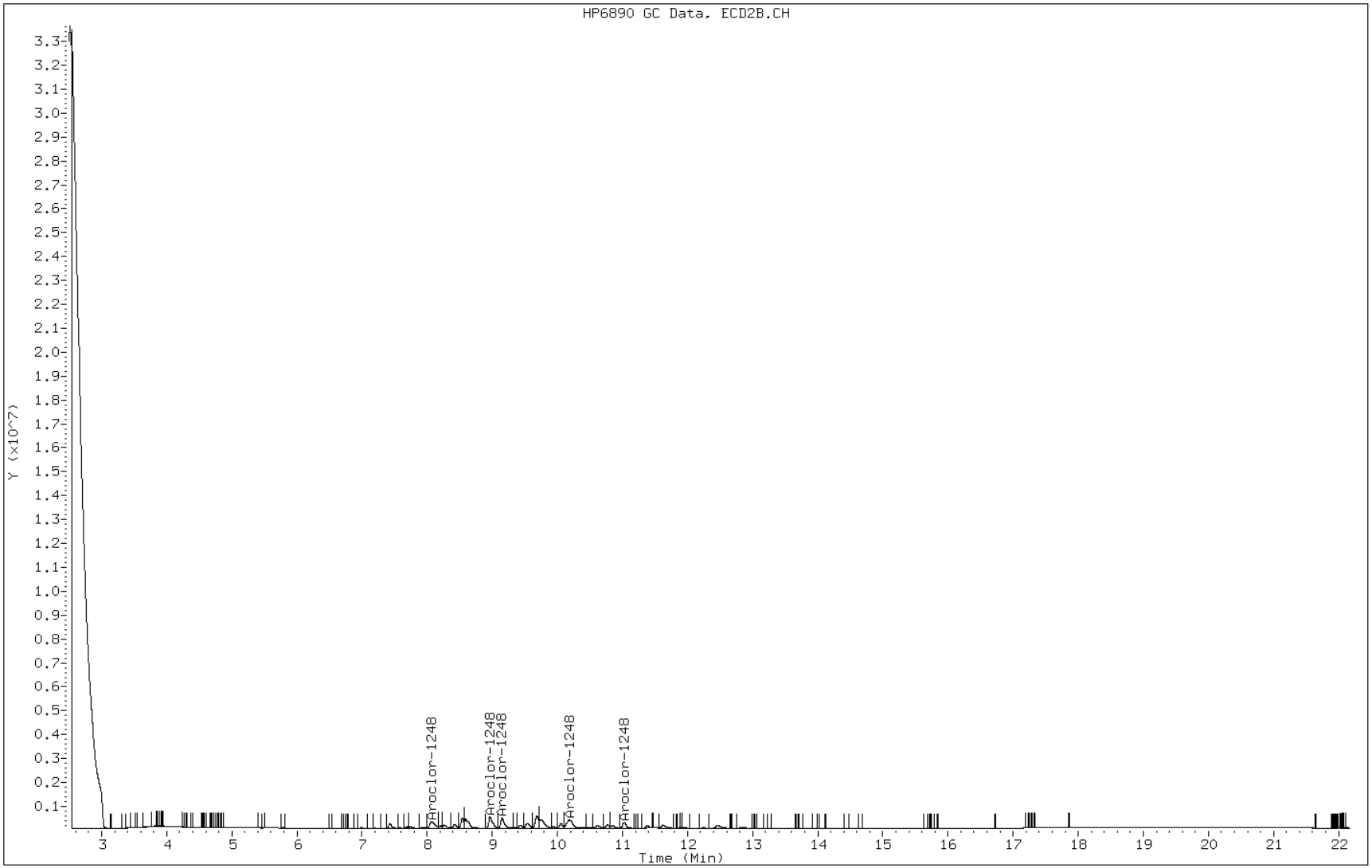
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: P1030428.D

Date: 15-OCT-2013 05:11

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/30 Calibration Date: 10/15/2013 05:40

Instrument ID: GC8 Calib Start Date: 10/14/2013 23:21

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/14/2013 23:21

Lab File ID: P1030429.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1262 Peak 1	Ave	1054564	1058806		0.502	0.500	0.4	20.0
PCB-1262 Peak 2	Ave	1112308	1172788		0.527	0.500	5.4	20.0
PCB-1262 Peak 3	Ave	1573854	1570382		0.499	0.500	-0.2	20.0
PCB-1262 Peak 4	Ave	523574	516652		0.493	0.500	-1.3	20.0
PCB-1262 Peak 5	Ave	1070404	1072566		0.501	0.500	0.2	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/30 Calibration Date: 10/15/2013 05:40

Instrument ID: GC8 Calib Start Date: 10/14/2013 23:21

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/14/2013 23:21

Lab File ID: P1030429.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1262 Peak 1	11.41	11.36	11.46
PCB-1262 Peak 2	11.95	11.91	12.01
PCB-1262 Peak 3	13.04	12.99	13.09
PCB-1262 Peak 4	14.01	13.96	14.06
PCB-1262 Peak 5	17.23	17.18	17.28

Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030429.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030429.D
Lab Smp Id: ICV 867349
Inj Date : 15-OCT-2013 05:40
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : ICV 867349
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 03:14 Cal File: P1030424.D
Als bottle: 31 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1262.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

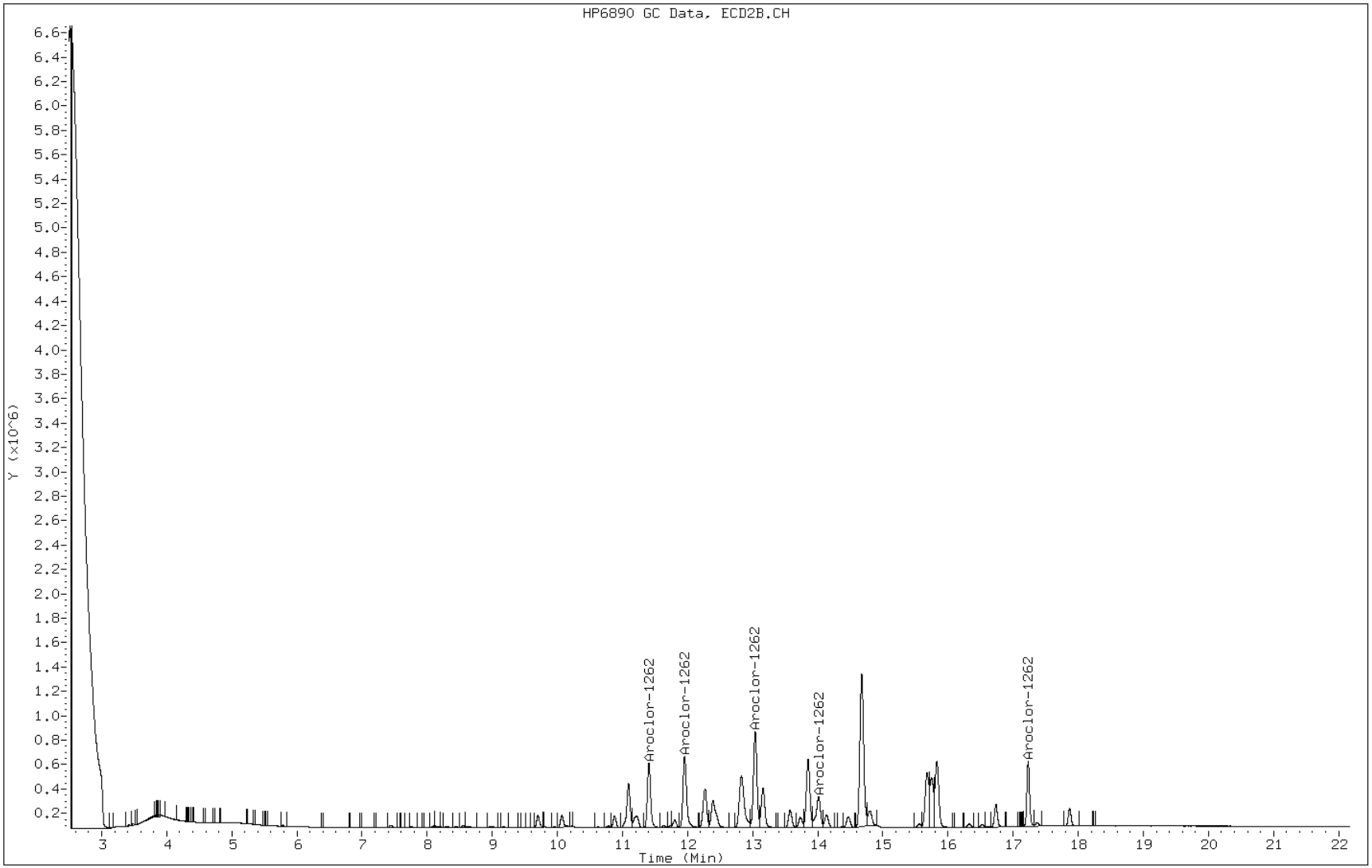
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
9 Aroclor-1262					CAS #: 37324-23-5		
11.405	11.411	-0.006	529403	0.50000	0.50201	0.00- 0.00	0.00
11.954	11.958	-0.004	586394	0.50000	0.52719	0.00- 0.00	0.00
13.038	13.042	-0.004	785191	0.50000	0.49890	0.00- 0.00	0.00
14.013	14.014	-0.001	258326	0.50000	0.49339	0.00- 0.00	0.00
17.230	17.234	-0.004	536283	0.50000	0.50101	0.00- 0.00	0.00
		Average of Peak Amounts =			0.50450		

Data File: P1030429.D

Date: 15-OCT-2013 05:40

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/31 Calibration Date: 10/15/2013 06:09

Instrument ID: GC8 Calib Start Date: 10/14/2013 23:50

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/14/2013 23:50

Lab File ID: P1030430.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1268 Peak 1	Ave	3023882	3007502		0.497	0.500	-0.5	20.0
PCB-1268 Peak 2	Ave	2846994	2873184		0.505	0.500	0.9	20.0
PCB-1268 Peak 3	Ave	2785048	2804810		0.504	0.500	0.7	20.0
PCB-1268 Peak 4	Ave	8652636	8824990		0.510	0.500	2.0	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/31 Calibration Date: 10/15/2013 06:09

Instrument ID: GC8 Calib Start Date: 10/14/2013 23:50

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/14/2013 23:50

Lab File ID: P1030430.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1268 Peak 1	15.67	15.63	15.73
PCB-1268 Peak 2	15.82	15.78	15.88
PCB-1268 Peak 3	16.32	16.28	16.38
PCB-1268 Peak 4	17.86	17.82	17.92

Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030430.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030430.D
Lab Smp Id: ICV 867350
Inj Date : 15-OCT-2013 06:09
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : ICV 867350
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 03:14 Cal File: P1030424.D
Als bottle: 32 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1268.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

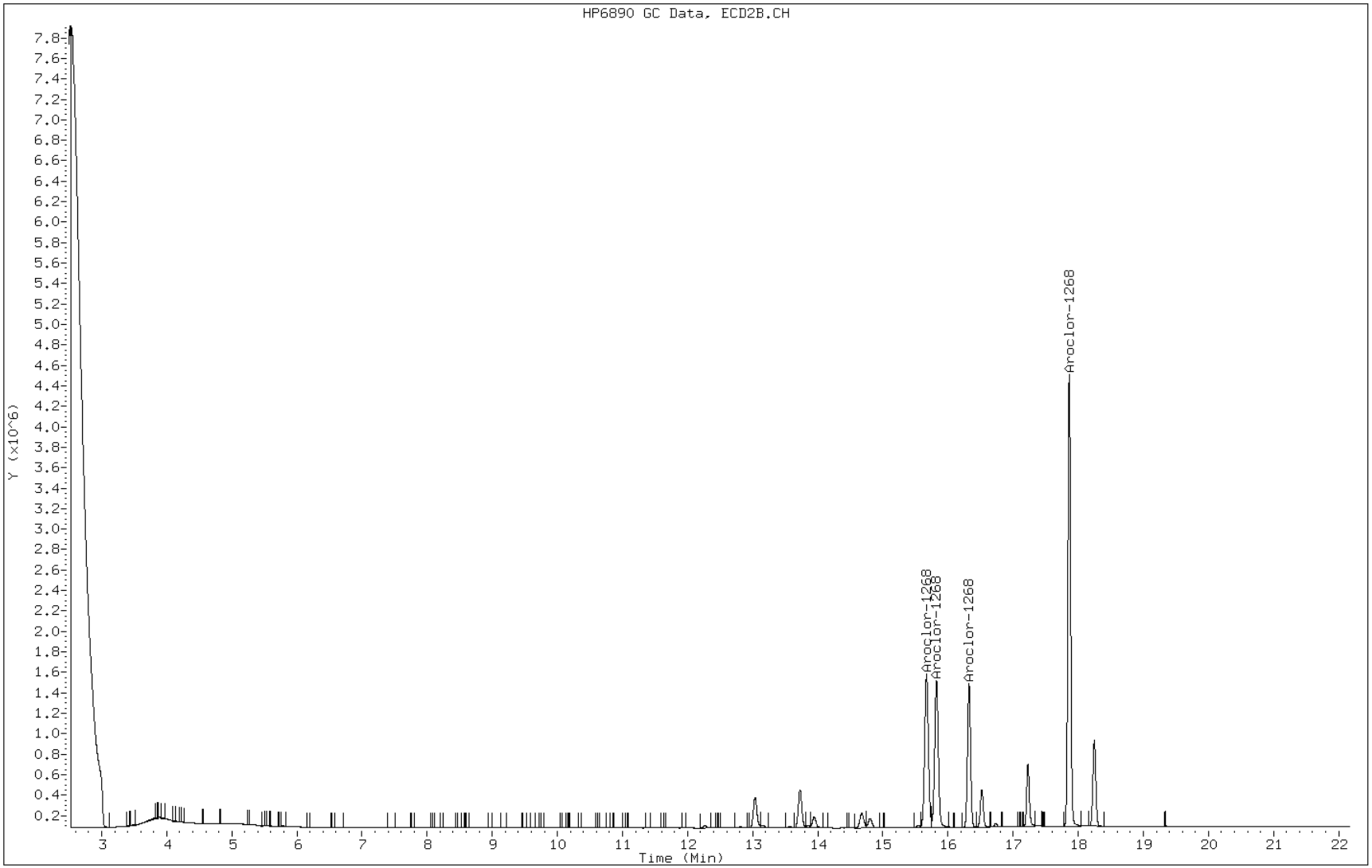
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE		RATIO
10 Aroclor-1268					CAS #: 11100-14-4			
15.670	15.679	-0.009	1503751	0.50000	0.49729	0.00-	0.00	0.00
15.823	15.831	-0.008	1436592	0.50000	0.50460	0.00-	0.00	0.00
16.323	16.329	-0.006	1402405	0.50000	0.50355	0.00-	0.00	0.00
17.861	17.870	-0.009	4412495	0.50000	0.50996	0.00-	0.00	0.00
		Average of Peak Amounts =			0.50385			

Data File: P1030430.D

Date: 15-OCT-2013 06:09

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/32 Calibration Date: 10/15/2013 06:38

Instrument ID: GC8 Calib Start Date: 10/15/2013 00:19

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/15/2013 03:14

Lab File ID: P1030431.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	1381458	1222850		0.443	0.500	-11.5	20.0
PCB-1016 Peak 2	Ave	1693674	1436948		0.424	0.500	-15.2	20.0
PCB-1016 Peak 3	Ave	686389	614428		0.448	0.500	-10.5	20.0
PCB-1016 Peak 4	Ave	860385	785834		0.457	0.500	-8.7	20.0
PCB-1016 Peak 5	Ave	674203	602294		0.447	0.500	-10.7	20.0
PCB-1260 Peak 1	Ave	1450043	1375876		0.474	0.500	-5.1	20.0
PCB-1260 Peak 2	Ave	1571664	1482378		0.472	0.500	-5.7	20.0
PCB-1260 Peak 3	Ave	1565848	1500572		0.479	0.500	-4.2	20.0
PCB-1260 Peak 4	Ave	1059216	1030186		0.486	0.500	-2.7	20.0
PCB-1260 Peak 5	Ave	2267666	2176576		0.480	0.500	-4.0	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/32 Calibration Date: 10/15/2013 06:38

Instrument ID: GC8 Calib Start Date: 10/15/2013 00:19

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/15/2013 03:14

Lab File ID: P1030431.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	7.42	7.38	7.48
PCB-1016 Peak 2	8.06	8.04	8.14
PCB-1016 Peak 3	8.42	8.35	8.45
PCB-1016 Peak 4	8.96	8.91	9.01
PCB-1016 Peak 5	9.69	9.64	9.74
PCB-1260 Peak 1	11.40	11.35	11.45
PCB-1260 Peak 2	11.94	11.89	11.99
PCB-1260 Peak 3	12.83	12.77	12.87
PCB-1260 Peak 4	13.84	13.79	13.89
PCB-1260 Peak 5	14.67	14.61	14.71
Tetrachloro-m-xylene	0.00	6.34	6.44
DCB Decachlorobiphenyl (Surr)	18.24	18.20	18.30

Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030431.D
Report Date: 15-Oct-2013 10:05

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030431.D
Lab Smp Id: ICV 867358
Inj Date : 15-OCT-2013 06:38
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : ICV 867358
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 10:05 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 03:14 Cal File: P1030424.D
Als bottle: 33 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
$ 2 Tetrachloro-m-xylene					CAS #: 877-09-8		
Peaks not detected for Quant. or Qual. signal(s).							
4 Aroclor-1016					CAS #: 12674-11-2		
7.420	7.432	-0.012	611425	0.50000	0.44259	0.00- 0.00	0.00(a)
8.061	8.093	-0.032	718474	0.50000	0.42421	100.00- 100.00	0.00
8.415	8.395	0.020	307214	0.50000	0.44758	223.51- 223.51	0.00
8.962	8.959	0.003	392917	0.50000	0.45668	223.51- 223.51	0.00
9.689	9.687	0.002	301147	0.50000	0.44667	317.56- 317.56	0.00
		Average of Peak Amounts =			0.44355		
8 Aroclor-1260					CAS #: 11096-82-5		
11.398	11.399	-0.001	687938	0.50000	0.47443	0.00- 0.00	0.00(a)
11.943	11.942	0.001	741189	0.50000	0.47160	115.86- 115.86	0.00
12.825	12.818	0.007	750286	0.50000	0.47916	136.91- 136.91	0.00
13.842	13.842	0.000	515093	0.50000	0.48630	140.00- 140.00	0.00
14.666	14.664	0.002	1088288	0.50000	0.47992	128.33- 128.33	0.00
		Average of Peak Amounts =			0.47828		
$ 11 DCB Decachlorobiphenyl (Surr)					CAS #: 2051-24-3		
18.243	18.246	-0.003	2099	0.02500	0.000095304		

Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030431.D
Report Date: 15-Oct-2013 10:05

QC Flag Legend

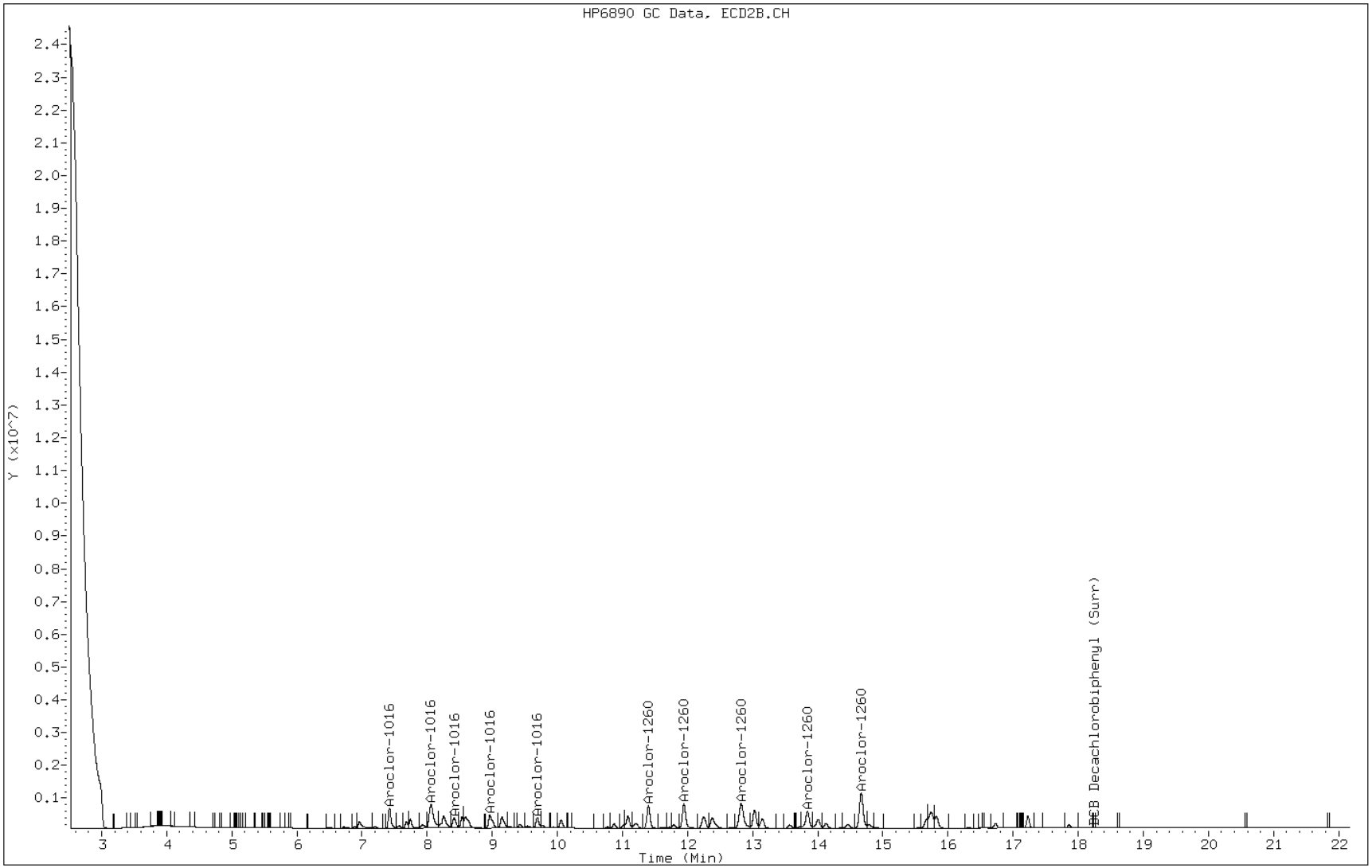
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: P1030431.D

Date: 15-OCT-2013 06:38

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/38 Calibration Date: 10/15/2013 10:03

Instrument ID: GC8 Calib Start Date: 10/14/2013 17:59

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/14/2013 19:56

Lab File ID: P1030438.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1242 Peak 1	Ave	447461	426774		0.477	0.500	-4.6	20.0
PCB-1242 Peak 2	Ave	481329	478066		0.497	0.500	-0.7	20.0
PCB-1242 Peak 3	Ave	551185	534042		0.484	0.500	-3.1	20.0
PCB-1242 Peak 4	Ave	230790	254912		0.552	0.500	10.5	20.0
PCB-1242 Peak 5	Ave	423399	395690		0.467	0.500	-6.5	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/38 Calibration Date: 10/15/2013 10:03

Instrument ID: GC8 Calib Start Date: 10/14/2013 17:59

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/14/2013 19:56

Lab File ID: P1030438.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1242 Peak 1	7.75	7.70	7.80
PCB-1242 Peak 2	8.42	8.36	8.46
PCB-1242 Peak 3	9.16	9.10	9.20
PCB-1242 Peak 4	9.54	9.49	9.59
PCB-1242 Peak 5	10.19	10.13	10.23

Data File: \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030438.D
Report Date: 15-Oct-2013 11:10

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\P1030438.D
Lab Smp Id: ICV 867347
Inj Date : 15-OCT-2013 10:03
Operator : 402360 Inst ID: gc8.i
Smp Info : 10143B8082.b
Misc Info : ICV 867347
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10143B8082ALL.b\PCBBALL.m
Meth Date : 15-Oct-2013 11:10 guptaa Quant Type: ESTD
Cal Date : 15-OCT-2013 03:14 Cal File: P1030424.D
Als bottle: 29 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1242.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
5 Aroclor-1242					CAS #: 53469-21-9		
7.747	7.745	0.002	213387	0.50000	0.47688	0.00- 0.00	0.00(a)
8.421	8.413	0.008	239033	0.50000	0.49661	330.13- 330.13	0.00
9.155	9.154	0.001	267021	0.50000	0.48445	769.70- 769.70	0.00
9.539	9.535	0.004	127456	0.50000	0.55226	532.48- 532.48	0.00
10.189	10.179	0.010	197845	0.50000	0.46728	334.30- 334.30	0.00
		Average of Peak Amounts =			0.49550		

QC Flag Legend

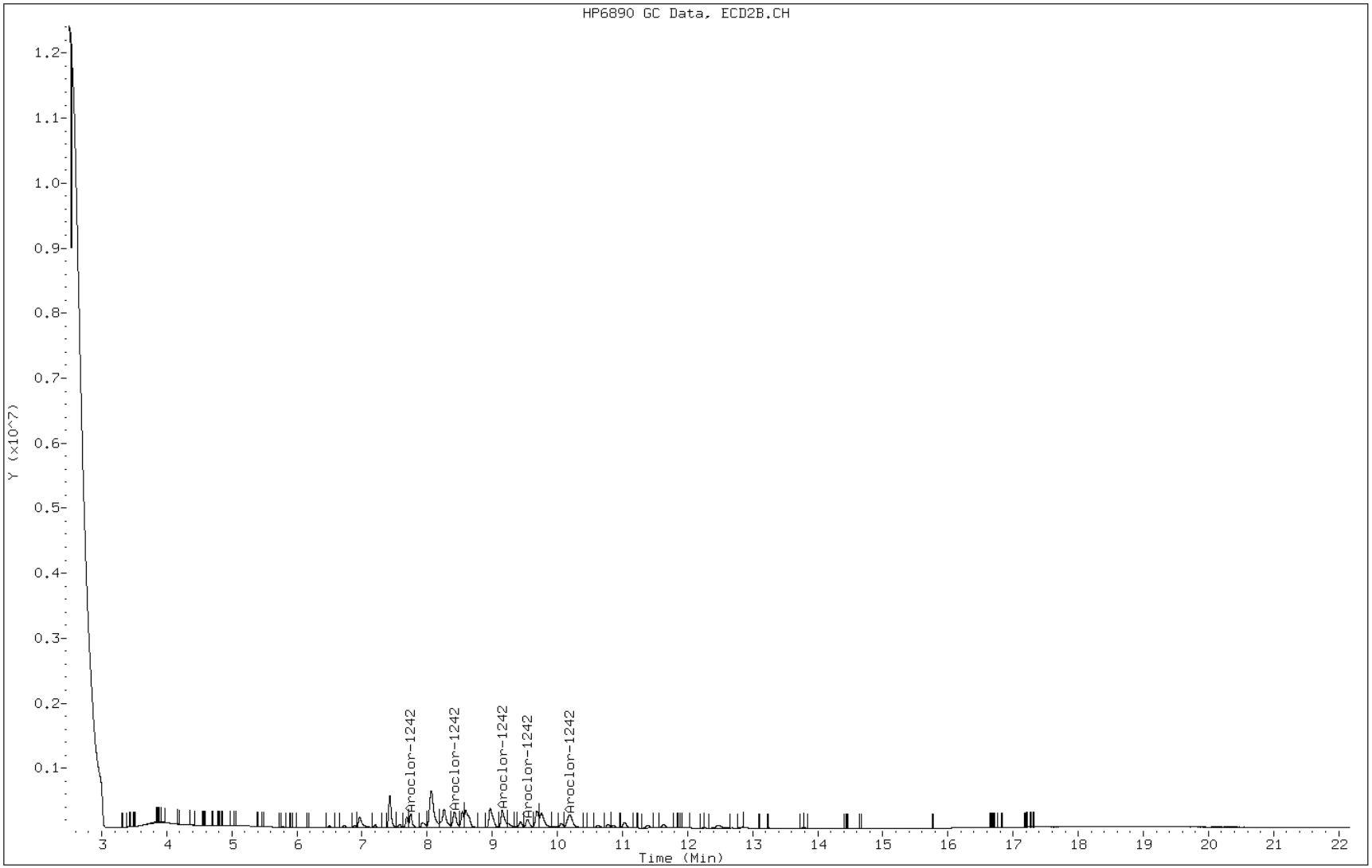
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: P1030438.D

Date: 15-OCT-2013 10:03

Client ID: Instrument: gc8.i

Sample Info: 10143B8082.b Operator: 402360



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCV 180-87359/6 Calibration Date: 10/17/2013 17:03

Instrument ID: GC8 Calib Start Date: 10/15/2013 00:19

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/15/2013 03:14

Lab File ID: P1030546.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	1381458	1318334		0.477	0.500	-4.6	20.0
PCB-1016 Peak 2	Ave	1693674	1508558		0.445	0.500	-10.9	20.0
PCB-1016 Peak 3	Ave	686389	594998		0.433	0.500	-13.3	20.0
PCB-1016 Peak 4	Ave	860385	815678		0.474	0.500	-5.2	20.0
PCB-1016 Peak 5	Ave	674203	629256		0.467	0.500	-6.7	20.0
PCB-1260 Peak 1	Ave	1450043	1406442		0.485	0.500	-3.0	20.0
PCB-1260 Peak 2	Ave	1571664	1520036		0.484	0.500	-3.3	20.0
PCB-1260 Peak 3	Ave	1565848	1540430		0.492	0.500	-1.6	20.0
PCB-1260 Peak 4	Ave	1059216	1038920		0.490	0.500	-1.9	20.0
PCB-1260 Peak 5	Ave	2267666	2231606		0.492	0.500	-1.6	20.0
Tetrachloro-m-xylene	Ave	46451156	43128920		0.0232	0.0250	-7.2	20.0
DCB Decachlorobiphenyl (Surr)	Ave	22024276	20211360		0.0229	0.0250	-8.2	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCV 180-87359/6 Calibration Date: 10/17/2013 17:03

Instrument ID: GC8 Calib Start Date: 10/15/2013 00:19

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/15/2013 03:14

Lab File ID: P1030546.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	7.43	7.35	7.45
PCB-1016 Peak 2	8.07	7.99	8.09
PCB-1016 Peak 3	8.42	8.34	8.44
PCB-1016 Peak 4	8.97	8.89	8.99
PCB-1016 Peak 5	9.70	9.62	9.72
PCB-1260 Peak 1	11.41	11.33	11.43
PCB-1260 Peak 2	11.95	11.87	11.97
PCB-1260 Peak 3	12.84	12.75	12.85
PCB-1260 Peak 4	13.85	13.77	13.87
PCB-1260 Peak 5	14.68	14.59	14.69
Tetrachloro-m-xylene	6.40	6.33	6.43
DCB Decachlorobiphenyl (Surr)	18.26	18.19	18.29

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030546.D
Report Date: 21-Oct-2013 07:51

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030546.D
Lab Smp Id: CCVRT-967303
Inj Date : 17-OCT-2013 17:03
Operator : 402360 Inst ID: gc8.i
Smp Info : 10173B8082A.b
Misc Info : CCVRT-967303
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\PCBBALL.m
Meth Date : 21-Oct-2013 07:51 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 03:14 Cal File: P1030424.D
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 2 Tetrachloro-m-xylene					CAS #: 877-09-8		
6.398	6.389	0.009	1078223	0.02500	0.023212		
4 Aroclor-1016					CAS #: 12674-11-2		
7.427	7.400	0.027	659167	0.50000	0.47715	0.00- 0.00	0.00(a)
8.065	8.031	0.034	754279	0.50000	0.44535	100.00- 100.00	0.00
8.421	8.383	0.038	297499	0.50000	0.43343	223.51- 223.51	0.00
8.970	8.938	0.032	407839	0.50000	0.47402	223.51- 223.51	0.00
9.700	9.664	0.036	314628	0.50000	0.46667	317.56- 317.56	0.00
Average of Peak Amounts =					0.45932		
8 Aroclor-1260					CAS #: 11096-82-5		
11.408	11.399	0.009	703221	0.50000	0.48496	0.00- 0.00	0.00(a)
11.954	11.942	0.012	760018	0.50000	0.48358	115.86- 115.86	0.00
12.835	12.818	0.017	770215	0.50000	0.49188	136.91- 136.91	0.00
13.853	13.842	0.011	519460	0.50000	0.49042	140.00- 140.00	0.00
14.675	14.664	0.011	1115803	0.50000	0.49205	128.33- 128.33	0.00
Average of Peak Amounts =					0.48858		
$ 11 DCB Decachlorobiphenyl (Surr)					CAS #: 2051-24-3		
18.257	18.246	0.011	505284	0.02500	0.022942		

QC Flag Legend

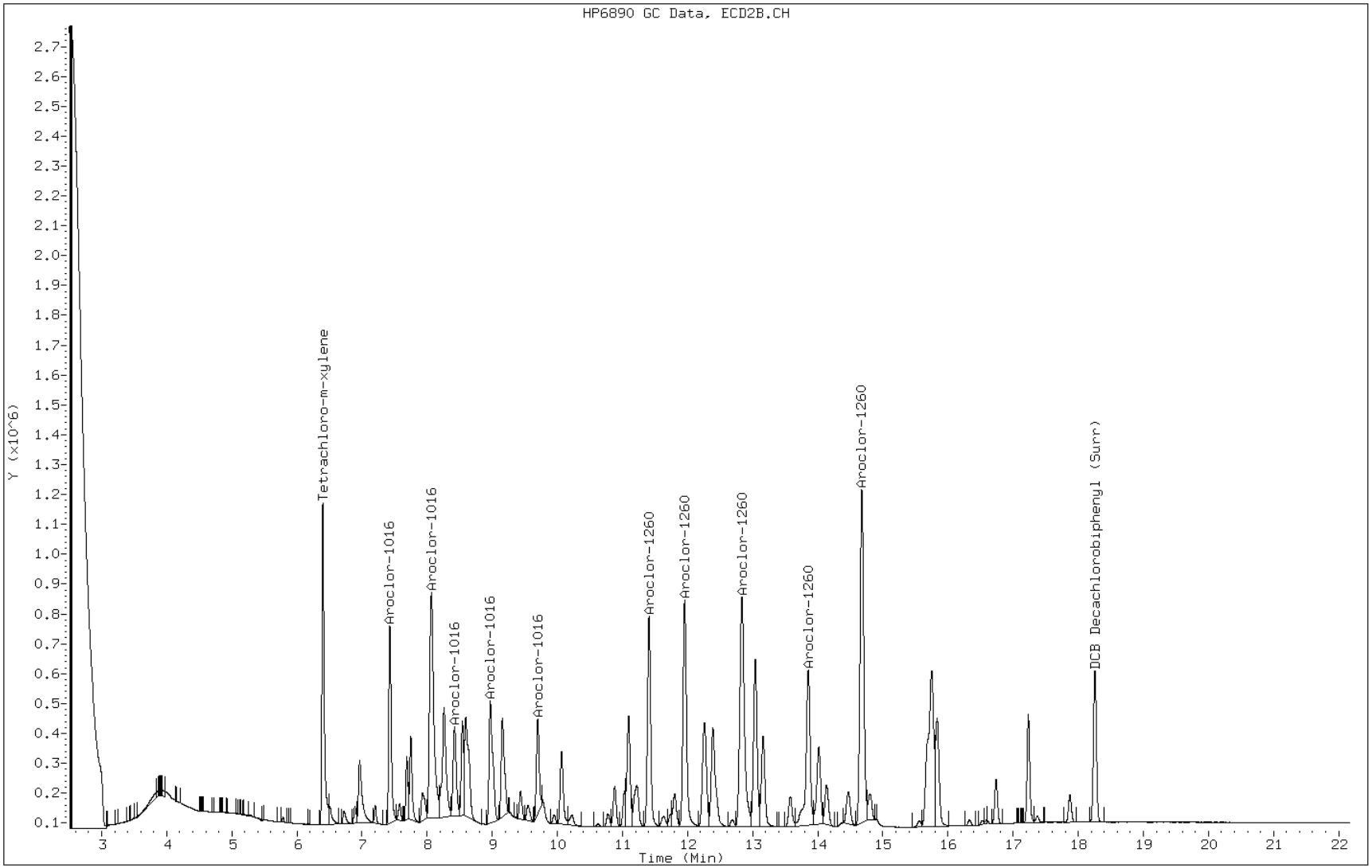
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: P1030546.D

Date: 17-OCT-2013 17:03

Client ID: Instrument: gc8.i

Sample Info: 10173B8082A.b Operator: 402360



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCVRT 180-87359/8 Calibration Date: 10/19/2013 22:56

Instrument ID: GC8 Calib Start Date: 10/15/2013 00:19

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/15/2013 03:14

Lab File ID: P1030656.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	1381458	1311118		0.475	0.500	-5.1	20.0
PCB-1016 Peak 2	Ave	1693674	1621812		0.479	0.500	-4.2	20.0
PCB-1016 Peak 3	Ave	686389	594604		0.433	0.500	-13.4	20.0
PCB-1016 Peak 4	Ave	860385	776354		0.451	0.500	-9.8	20.0
PCB-1016 Peak 5	Ave	674203	624418		0.463	0.500	-7.4	20.0
PCB-1260 Peak 1	Ave	1450043	1268280		0.437	0.500	-12.5	20.0
PCB-1260 Peak 2	Ave	1571664	1383268		0.440	0.500	-12.0	20.0
PCB-1260 Peak 3	Ave	1565848	1417580		0.453	0.500	-9.5	20.0
PCB-1260 Peak 4	Ave	1059216	918864		0.434	0.500	-13.3	20.0
PCB-1260 Peak 5	Ave	2267666	1998468		0.441	0.500	-11.9	20.0
Tetrachloro-m-xylene	Ave	46451156	45350360		0.0244	0.0250	-2.4	20.0
DCB Decachlorobiphenyl (Surr)	Ave	22024276	14751360		0.0167	0.0250	-33.0*	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCVRT 180-87359/8 Calibration Date: 10/19/2013 22:56

Instrument ID: GC8 Calib Start Date: 10/15/2013 00:19

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/15/2013 03:14

Lab File ID: P1030656.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	7.40	7.35	7.45
PCB-1016 Peak 2	8.03	7.99	8.09
PCB-1016 Peak 3	8.39	8.34	8.44
PCB-1016 Peak 4	8.94	8.89	8.99
PCB-1016 Peak 5	9.67	9.62	9.72
PCB-1260 Peak 1	11.38	11.33	11.43
PCB-1260 Peak 2	11.92	11.87	11.97
PCB-1260 Peak 3	12.80	12.75	12.85
PCB-1260 Peak 4	13.82	13.77	13.87
PCB-1260 Peak 5	14.64	14.59	14.69
Tetrachloro-m-xylene	6.37	6.33	6.43
DCB Decachlorobiphenyl (Surr)	18.24	18.19	18.29

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030656.D
Report Date: 21-Oct-2013 07:51

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030656.D
Lab Smp Id: CCVRT-967303
Inj Date : 19-OCT-2013 22:56
Operator : 402360 Inst ID: gc8.i
Smp Info : 10183B8082A.b
Misc Info : CCVRT-967303
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\PCBBALL.m
Meth Date : 21-Oct-2013 07:51 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 03:14 Cal File: P1030424.D
Als bottle: 33 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 2 Tetrachloro-m-xylene					CAS #: 877-09-8		
6.374	6.389	-0.015	1133759	0.02500	0.024408		
4 Aroclor-1016					CAS #: 12674-11-2		
7.402	7.400	0.002	655559	0.50000	0.47454	0.00- 0.00	0.00(a)
8.032	8.031	0.001	810906	0.50000	0.47878	100.00- 100.00	0.00
8.387	8.383	0.004	297302	0.50000	0.43314	223.51- 223.51	0.00
8.940	8.938	0.002	388177	0.50000	0.45117	223.51- 223.51	0.00
9.669	9.664	0.005	312209	0.50000	0.46308	317.56- 317.56	0.00
Average of Peak Amounts =					0.46014		
8 Aroclor-1260					CAS #: 11096-82-5		
11.375	11.399	-0.024	634140	0.50000	0.43732	0.00- 0.00	0.00(a)
11.919	11.942	-0.023	691634	0.50000	0.44006	115.86- 115.86	0.00
12.797	12.818	-0.021	708790	0.50000	0.45266	136.91- 136.91	0.00
13.817	13.842	-0.025	459432	0.50000	0.43375	140.00- 140.00	0.00
14.640	14.664	-0.024	999234	0.50000	0.44064	128.33- 128.33	0.00
Average of Peak Amounts =					0.44089		
$ 11 DCB Decachlorobiphenyl (Surr)					CAS #: 2051-24-3		
18.235	18.246	-0.011	368784	0.02500	0.016744		

QC Flag Legend

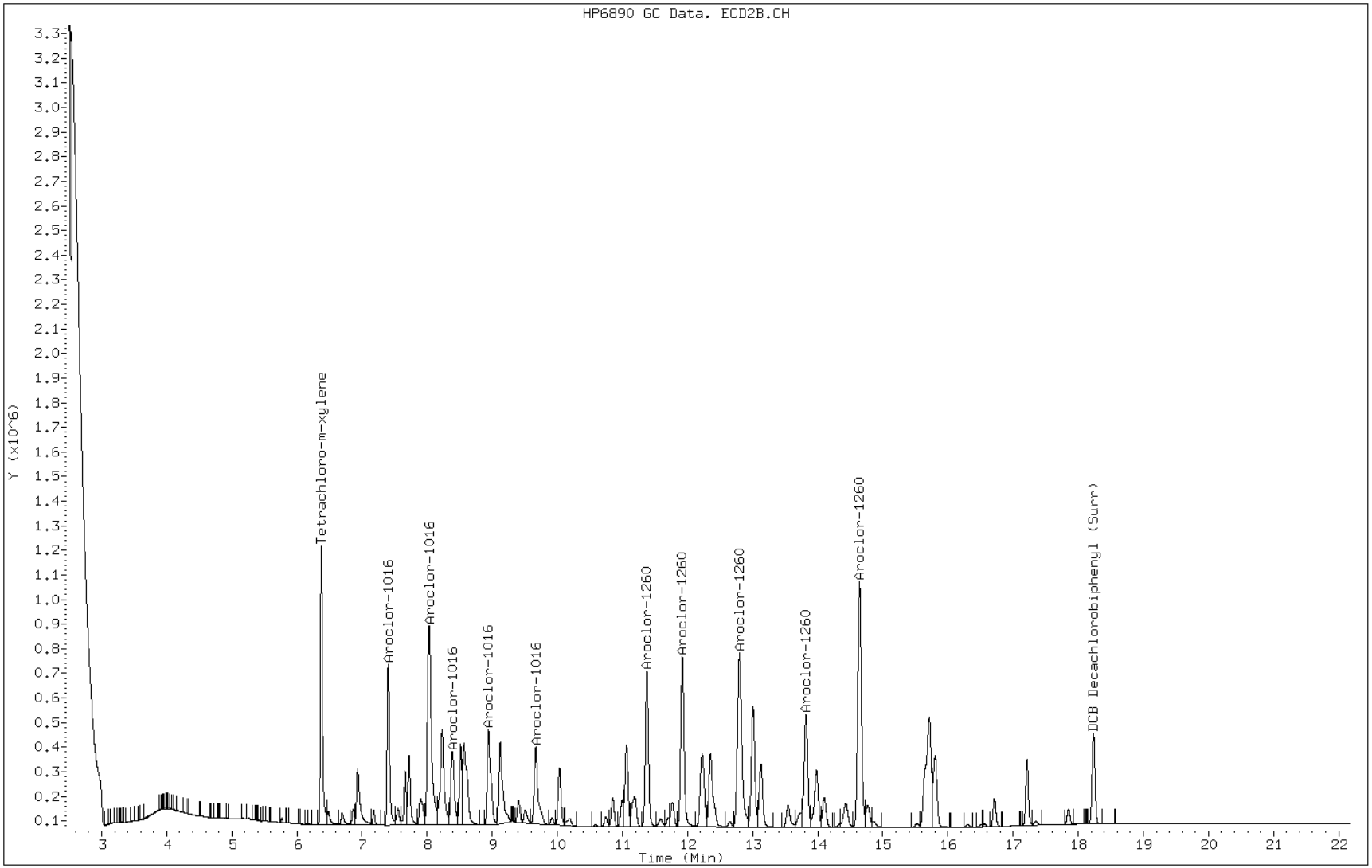
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: P1030656.D

Date: 19-OCT-2013 22:56

Client ID: Instrument: gc8.i

Sample Info: 10183B8082A.b Operator: 402360



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCV 180-87359/19 Calibration Date: 10/20/2013 05:45

Instrument ID: GC8 Calib Start Date: 10/15/2013 00:19

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/15/2013 03:14

Lab File ID: P1030670.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	1381458	1412882		0.511	0.500	2.3	20.0
PCB-1016 Peak 2	Ave	1693674	1761250		0.520	0.500	4.0	20.0
PCB-1016 Peak 3	Ave	686389	638986		0.465	0.500	-6.9	20.0
PCB-1016 Peak 4	Ave	860385	847498		0.493	0.500	-1.5	20.0
PCB-1016 Peak 5	Ave	674203	671216		0.498	0.500	-0.4	20.0
PCB-1260 Peak 1	Ave	1450043	1416000		0.488	0.500	-2.3	20.0
PCB-1260 Peak 2	Ave	1571664	1579826		0.503	0.500	0.5	20.0
PCB-1260 Peak 3	Ave	1565848	1616442		0.516	0.500	3.2	20.0
PCB-1260 Peak 4	Ave	1059216	1066916		0.504	0.500	0.7	20.0
PCB-1260 Peak 5	Ave	2267666	2297974		0.507	0.500	1.3	20.0
Tetrachloro-m-xylene	Ave	46451156	47324760		0.0255	0.0250	1.9	20.0
DCB Decachlorobiphenyl (Surr)	Ave	22024276	17292840		0.0196	0.0250	-21.5*	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCV 180-87359/19 Calibration Date: 10/20/2013 05:45

Instrument ID: GC8 Calib Start Date: 10/15/2013 00:19

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/15/2013 03:14

Lab File ID: P1030670.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	7.40	7.35	7.45
PCB-1016 Peak 2	8.03	7.99	8.09
PCB-1016 Peak 3	8.38	8.34	8.44
PCB-1016 Peak 4	8.94	8.89	8.99
PCB-1016 Peak 5	9.66	9.62	9.72
PCB-1260 Peak 1	11.37	11.33	11.43
PCB-1260 Peak 2	11.92	11.87	11.97
PCB-1260 Peak 3	12.79	12.75	12.85
PCB-1260 Peak 4	13.81	13.77	13.87
PCB-1260 Peak 5	14.63	14.59	14.69
Tetrachloro-m-xylene	6.37	6.33	6.43
DCB Decachlorobiphenyl (Surr)	18.23	18.19	18.29

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030670.D
Report Date: 21-Oct-2013 07:53

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030670.D
Lab Smp Id: CCV-967303
Inj Date : 20-OCT-2013 05:45
Operator : 402360 Inst ID: gc8.i
Smp Info : 10183B8082ALL.b
Misc Info : CCV-967303
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\PCBBALL.m
Meth Date : 21-Oct-2013 07:53 guptaa Quant Type: ESTD
Cal Date : 15-OCT-2013 03:14 Cal File: P1030424.D
Als bottle: 47 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 2 Tetrachloro-m-xylene					CAS #: 877-09-8		
6.373	6.389	-0.016	1183119	0.02500	0.025470		
4 Aroclor-1016					CAS #: 12674-11-2		
7.400	7.400	0.000	706441	0.50000	0.51137	0.00- 0.00	0.00(a)
8.031	8.031	0.000	880625	0.50000	0.51995	100.00- 100.00	0.00
8.383	8.383	0.000	319493	0.50000	0.46547	223.51- 223.51	0.00
8.938	8.938	0.000	423749	0.50000	0.49251	223.51- 223.51	0.00
9.664	9.664	0.000	335608	0.50000	0.49778	317.56- 317.56	0.00
Average of Peak Amounts =					0.49742		
8 Aroclor-1260					CAS #: 11096-82-5		
11.371	11.399	-0.028	708000	0.50000	0.48826	0.00- 0.00	0.00(a)
11.917	11.942	-0.025	789913	0.50000	0.50260	115.86- 115.86	0.00
12.793	12.818	-0.025	808221	0.50000	0.51616	136.91- 136.91	0.00
13.813	13.842	-0.029	533458	0.50000	0.50363	140.00- 140.00	0.00
14.633	14.664	-0.031	1148987	0.50000	0.50668	128.33- 128.33	0.00
Average of Peak Amounts =					0.50347		
$ 11 DCB Decachlorobiphenyl (Surr)					CAS #: 2051-24-3		
18.230	18.246	-0.016	432321	0.02500	0.019629		

QC Flag Legend

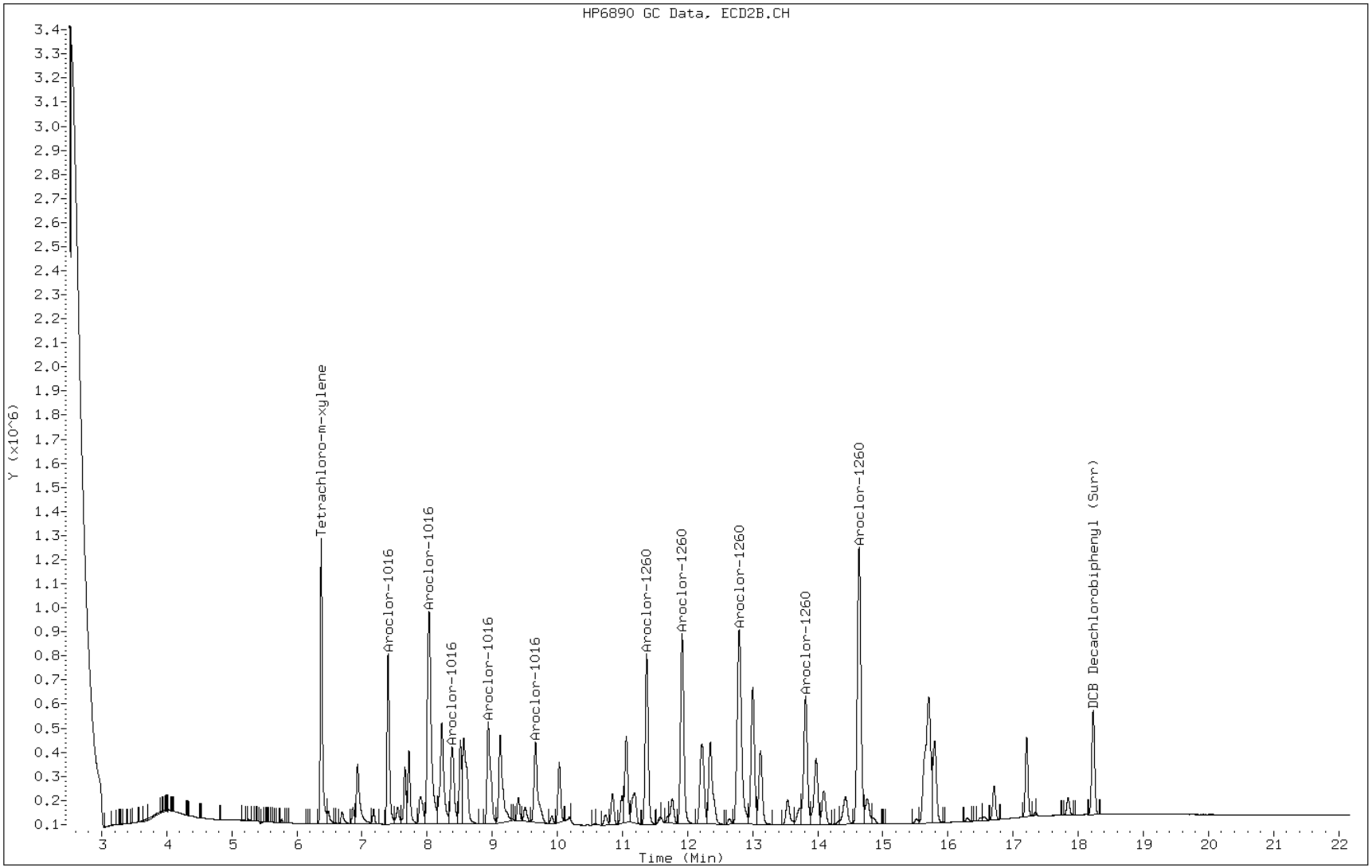
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: P1030670.D

Date: 20-OCT-2013 05:45

Client ID: Instrument: gc8.i

Sample Info: 10183B8082ALL.b Operator: 402360



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCV 180-87359/20 Calibration Date: 10/21/2013 09:55

Instrument ID: GC8 Calib Start Date: 10/15/2013 00:19

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/15/2013 03:14

Lab File ID: P1030720.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	1381458	1430864		0.518	0.500	3.6	20.0
PCB-1016 Peak 2	Ave	1693674	1761388		0.520	0.500	4.0	20.0
PCB-1016 Peak 3	Ave	686389	646464		0.471	0.500	-5.8	20.0
PCB-1016 Peak 4	Ave	860385	878942		0.511	0.500	2.2	20.0
PCB-1016 Peak 5	Ave	674203	725648		0.538	0.500	7.6	20.0
PCB-1260 Peak 1	Ave	1450043	1520680		0.524	0.500	4.9	20.0
PCB-1260 Peak 2	Ave	1571664	1691406		0.538	0.500	7.6	20.0
PCB-1260 Peak 3	Ave	1565848	1717062		0.548	0.500	9.7	20.0
PCB-1260 Peak 4	Ave	1059216	1154848		0.545	0.500	9.0	20.0
PCB-1260 Peak 5	Ave	2267666	2450208		0.540	0.500	8.0	20.0
Tetrachloro-m-xylene	Ave	46451156	48273720		0.0260	0.0250	3.9	20.0
DCB Decachlorobiphenyl (Surr)	Ave	22024276	17584360		0.0200	0.0250	-20.2*	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCV 180-87359/20 Calibration Date: 10/21/2013 09:55

Instrument ID: GC8 Calib Start Date: 10/15/2013 00:19

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/15/2013 03:14

Lab File ID: P1030720.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	7.40	7.35	7.45
PCB-1016 Peak 2	8.03	7.99	8.09
PCB-1016 Peak 3	8.38	8.34	8.44
PCB-1016 Peak 4	8.93	8.89	8.99
PCB-1016 Peak 5	9.66	9.62	9.72
PCB-1260 Peak 1	11.37	11.33	11.43
PCB-1260 Peak 2	11.91	11.87	11.97
PCB-1260 Peak 3	12.79	12.75	12.85
PCB-1260 Peak 4	13.81	13.77	13.87
PCB-1260 Peak 5	14.63	14.59	14.69
Tetrachloro-m-xylene	6.37	6.33	6.43
DCB Decachlorobiphenyl (Surr)	18.23	18.19	18.29

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030720.D
Report Date: 21-Oct-2013 12:26

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030720.D
Lab Smp Id: CCV-967303
Inj Date : 21-OCT-2013 09:55
Operator : 402360 Inst ID: gc8.i
Smp Info : 10193B608.b
Misc Info : CCV-967303
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\PCBBALL.m
Meth Date : 21-Oct-2013 12:26 guptaa Quant Type: ESTD
Cal Date : 15-OCT-2013 03:14 Cal File: P1030424.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 2 Tetrachloro-m-xylene					CAS #: 877-09-8		
6.369	6.369	0.000	1206843	0.02500	0.025981		
4 Aroclor-1016					CAS #: 12674-11-2		
7.395	7.395	0.000	715432	0.50000	0.51788	0.00- 0.00	0.00(a)
8.027	8.027	0.000	880694	0.50000	0.51999	100.00- 100.00	0.00
8.381	8.381	0.000	323232	0.50000	0.47092	223.51- 223.51	0.00
8.933	8.933	0.000	439471	0.50000	0.51078	223.51- 223.51	0.00
9.660	9.660	0.000	362824	0.50000	0.53815	317.56- 317.56	0.00
Average of Peak Amounts =					0.51154		
8 Aroclor-1260					CAS #: 11096-82-5		
11.365	11.365	0.000	760340	0.50000	0.52436	0.00- 0.00	0.00(a)
11.910	11.910	0.000	845703	0.50000	0.53809	115.86- 115.86	0.00
12.787	12.787	0.000	858531	0.50000	0.54828	136.91- 136.91	0.00
13.806	13.806	0.000	577424	0.50000	0.54514	140.00- 140.00	0.00
14.629	14.629	0.000	1225104	0.50000	0.54025	128.33- 128.33	0.00
Average of Peak Amounts =					0.53922		
$ 11 DCB Decachlorobiphenyl (Surr)					CAS #: 2051-24-3		
18.227	18.227	0.000	439609	0.02500	0.019960		

QC Flag Legend

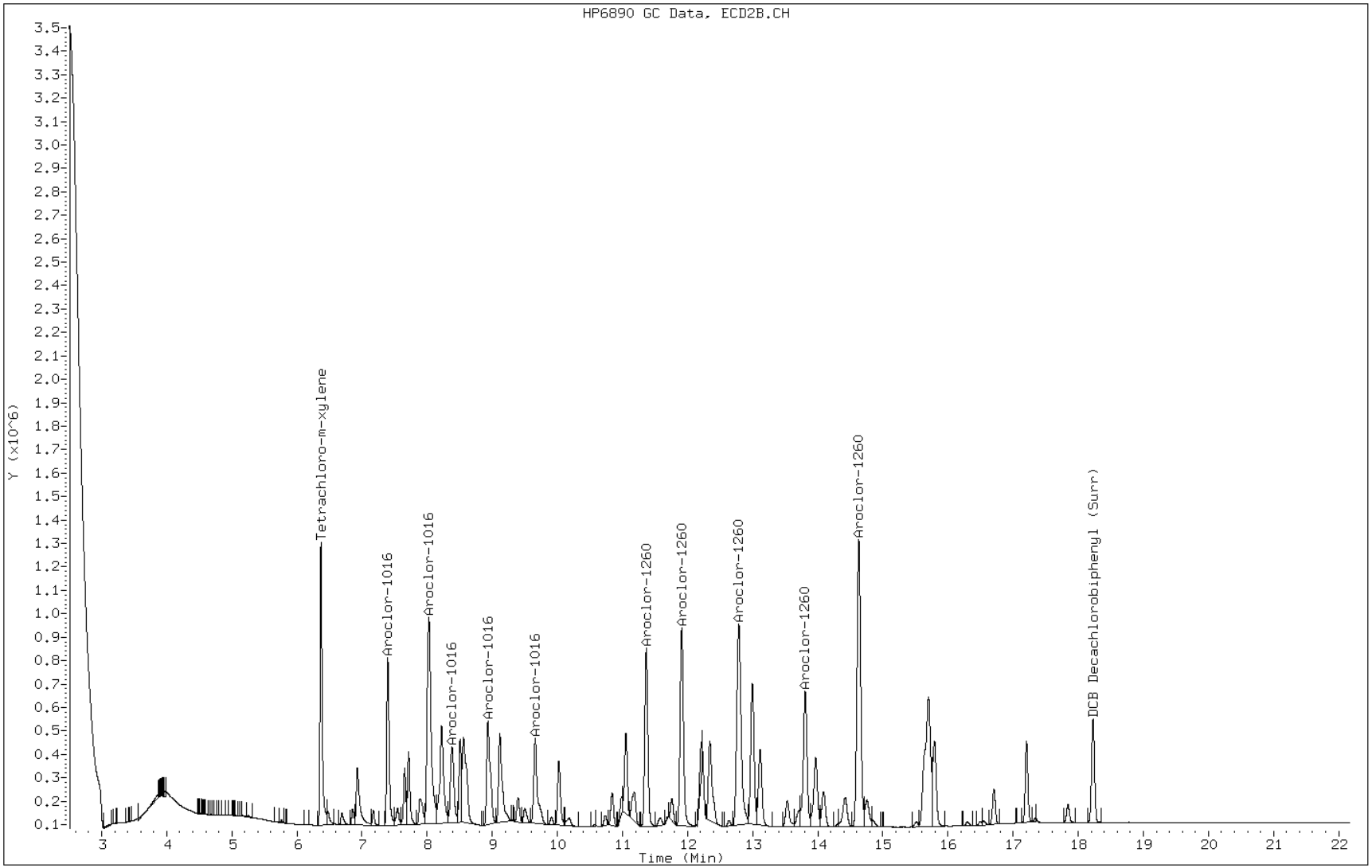
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: P1030720.D

Date: 21-OCT-2013 09:55

Client ID: Instrument: gc8.i

Sample Info: 10193B608.b Operator: 402360



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCV 180-87359/24 Calibration Date: 10/21/2013 12:51

Instrument ID: GC8 Calib Start Date: 10/15/2013 00:19

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/15/2013 03:14

Lab File ID: P1030726.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	1381458	1385546		0.501	0.500	0.3	20.0
PCB-1016 Peak 2	Ave	1693674	1675462		0.495	0.500	-1.1	20.0
PCB-1016 Peak 3	Ave	686389	641912		0.468	0.500	-6.5	20.0
PCB-1016 Peak 4	Ave	860385	862750		0.501	0.500	0.3	20.0
PCB-1016 Peak 5	Ave	674203	720600		0.534	0.500	6.9	20.0
PCB-1260 Peak 1	Ave	1450043	1464828		0.505	0.500	1.0	20.0
PCB-1260 Peak 2	Ave	1571664	1649132		0.525	0.500	4.9	20.0
PCB-1260 Peak 3	Ave	1565848	1677086		0.536	0.500	7.1	20.0
PCB-1260 Peak 4	Ave	1059216	1131188		0.534	0.500	6.8	20.0
PCB-1260 Peak 5	Ave	2267666	2363868		0.521	0.500	4.2	20.0
Tetrachloro-m-xylene	Ave	46451156	46123880		0.0248	0.0250	-0.7	20.0
DCB Decachlorobiphenyl (Surr)	Ave	22024276	17236960		0.0196	0.0250	-21.7*	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCV 180-87359/24 Calibration Date: 10/21/2013 12:51

Instrument ID: GC8 Calib Start Date: 10/15/2013 00:19

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/15/2013 03:14

Lab File ID: P1030726.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	7.40	7.35	7.45
PCB-1016 Peak 2	8.04	7.99	8.09
PCB-1016 Peak 3	8.39	8.34	8.44
PCB-1016 Peak 4	8.94	8.89	8.99
PCB-1016 Peak 5	9.67	9.62	9.72
PCB-1260 Peak 1	11.38	11.33	11.43
PCB-1260 Peak 2	11.92	11.87	11.97
PCB-1260 Peak 3	12.80	12.75	12.85
PCB-1260 Peak 4	13.82	13.77	13.87
PCB-1260 Peak 5	14.64	14.59	14.69
Tetrachloro-m-xylene	6.38	6.33	6.43
DCB Decachlorobiphenyl (Surr)	18.24	18.19	18.29

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030726.D
Report Date: 21-Oct-2013 13:46

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030726.D
Lab Smp Id: CCV-967303
Inj Date : 21-OCT-2013 12:51
Operator : 402360 Inst ID: gc8.i
Smp Info : 10193B608.b
Misc Info : CCV-967303
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\PCBBALL.m
Meth Date : 21-Oct-2013 13:46 guptaa Quant Type: ESTD
Cal Date : 15-OCT-2013 03:14 Cal File: P1030424.D
Als bottle: 8 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1660.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 2 Tetrachloro-m-xylene					CAS #: 877-09-8		
6.376	6.376	0.000	1153097	0.02500	0.024824		
4 Aroclor-1016					CAS #: 12674-11-2		
7.404	7.404	0.000	692773	0.50000	0.50148	0.00- 0.00	0.00(a)
8.037	8.037	0.000	837731	0.50000	0.49462	100.00- 100.00	0.00
8.390	8.390	0.000	320956	0.50000	0.46760	223.51- 223.51	0.00
8.944	8.944	0.000	431375	0.50000	0.50137	223.51- 223.51	0.00
9.670	9.670	0.000	360300	0.50000	0.53441	317.56- 317.56	0.00
Average of Peak Amounts =					0.49990		
8 Aroclor-1260					CAS #: 11096-82-5		
11.378	11.378	0.000	732414	0.50000	0.50510	0.00- 0.00	0.00(a)
11.921	11.921	0.000	824566	0.50000	0.52464	115.86- 115.86	0.00
12.799	12.799	0.000	838543	0.50000	0.53552	136.91- 136.91	0.00
13.819	13.819	0.000	565594	0.50000	0.53397	140.00- 140.00	0.00
14.640	14.640	0.000	1181934	0.50000	0.52121	128.33- 128.33	0.00
Average of Peak Amounts =					0.52409		
$ 11 DCB Decachlorobiphenyl (Surr)					CAS #: 2051-24-3		
18.237	18.237	0.000	430924	0.02500	0.019566		

QC Flag Legend

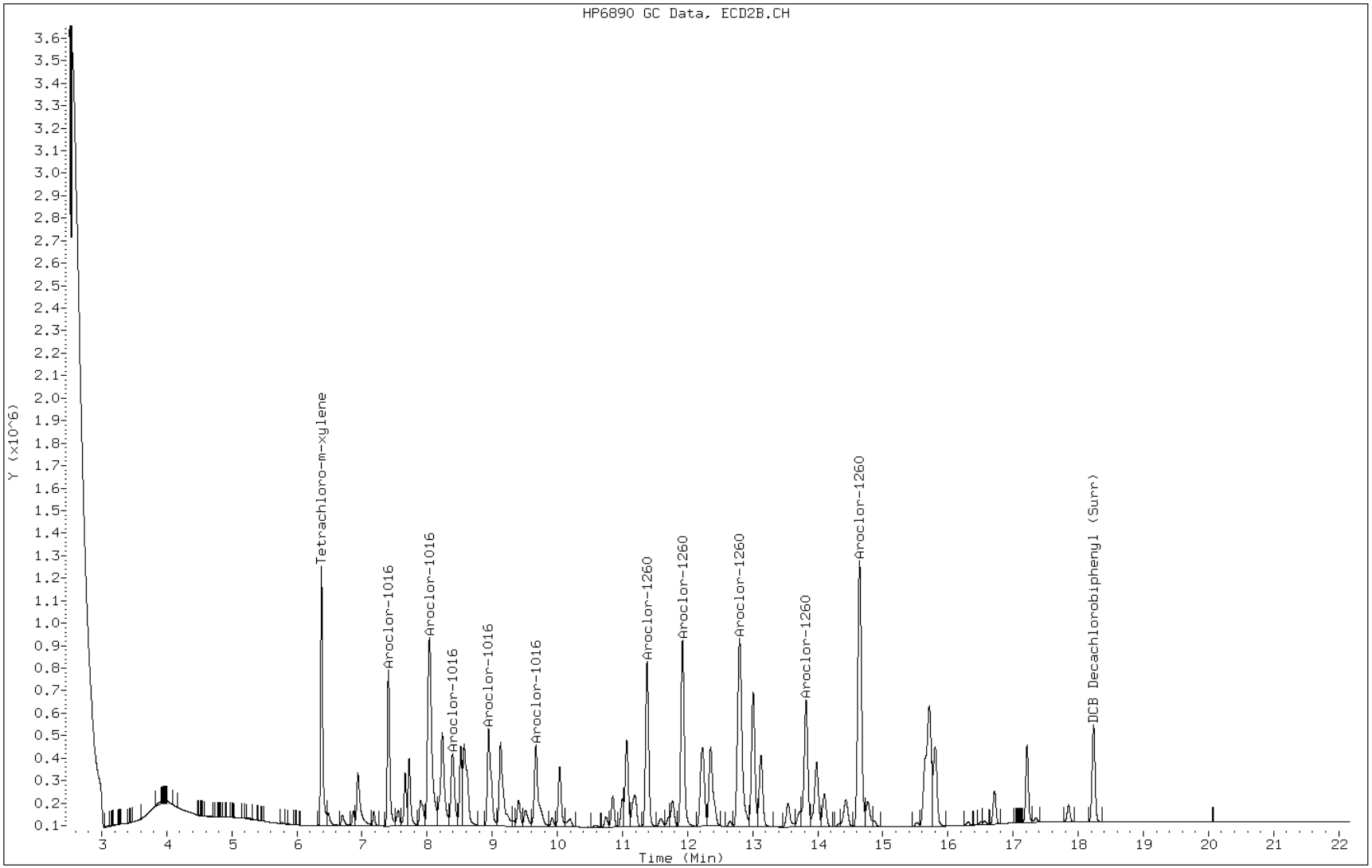
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

Data File: P1030726.D

Date: 21-OCT-2013 12:51

Client ID: Instrument: gc8.i

Sample Info: 10193B608.b Operator: 402360



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-86783/1-C

Matrix: Water | Lab File ID: P1030668.D

Analysis Method: 8082A | Date Collected:

Extraction Method: 3510C | Date Extracted: 10/15/2013 14:50

Sample wt/vol: 1000(mL) | Date Analyzed: 10/20/2013 04:46

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-1701 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	ND		0.010	0.0025
11104-28-2	PCB-1221	ND		0.010	0.0025
11141-16-5	PCB-1232	ND		0.010	0.0029
53469-21-9	PCB-1242	ND		0.010	0.0019
12672-29-6	PCB-1248	ND		0.010	0.0023
11097-69-1	PCB-1254	ND		0.010	0.0023
11096-82-5	PCB-1260	ND		0.010	0.0014
37324-23-5	PCB-1262	ND		0.010	0.0021
11100-14-4	PCB-1268	ND		0.010	0.0027

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	86		50-140
877-09-8	Tetrachloro-m-xylene	110		47-150

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030668.D
Report Date: 21-Oct-2013 07:53

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030668.D
Lab Smp Id: MB 180-86783/1-C
Inj Date : 20-OCT-2013 04:46
Operator : 402360 Inst ID: gc8.i
Smp Info : 10183B8082ALL.b
Misc Info : MB 180-86783/1-C
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\PCBBALL.m
Meth Date : 21-Oct-2013 07:51 gc8.i Quant Type: ESTD
Cal Date : 15-OCT-2013 03:14 Cal File: P1030424.D
Als bottle: 45
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 2 Tetrachloro-m-xylene					CAS #: 877-09-8		
6.374	6.389	-0.015	1025324	0.02207	0.022073		(R)
1 Aroclor-1221					CAS #: 11104-28-2		
Peaks not detected for Quant. or Qual. signal(s).							
4 Aroclor-1016					CAS #: 12674-11-2		
Peaks not detected for Quant. or Qual. signal(s).							
3 Aroclor-1232					CAS #: 11141-16-5		
Peaks not detected for Quant. or Qual. signal(s).							
6 Aroclor-1248					CAS #: 12672-29-6		
Peaks not detected for Quant. or Qual. signal(s).							
5 Aroclor-1242					CAS #: 53469-21-9		
Peaks not detected for Quant. or Qual. signal(s).							

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030668.D
Report Date: 21-Oct-2013 07:53

				CONCENTRATIONS ON-COL (ng)	FINAL (ug/L)	TARGET RANGE	RATIO
RT	EXP RT	DLT RT	RESPONSE				
7 Aroclor-1254					CAS #: 11097-69-1		

Peaks not detected for Quant. or Qual. signal(s).

---

9 Aroclor-1262					CAS #: 37324-23-5		

Peaks not detected for Quant. or Qual. signal(s).

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8 Aroclor-1260					CAS #: 11096-82-5		

Peaks not detected for Quant. or Qual. signal(s).

---

10 Aroclor-1268					CAS #: 11100-14-4		

Peaks not detected for Quant. or Qual. signal(s).

$ 11 DCB Decachlorobiphenyl (Surr)					CAS #: 2051-24-3		
18.231	18.246	-0.015	381986	0.01734	0.017344		(R)

QC Flag Legend

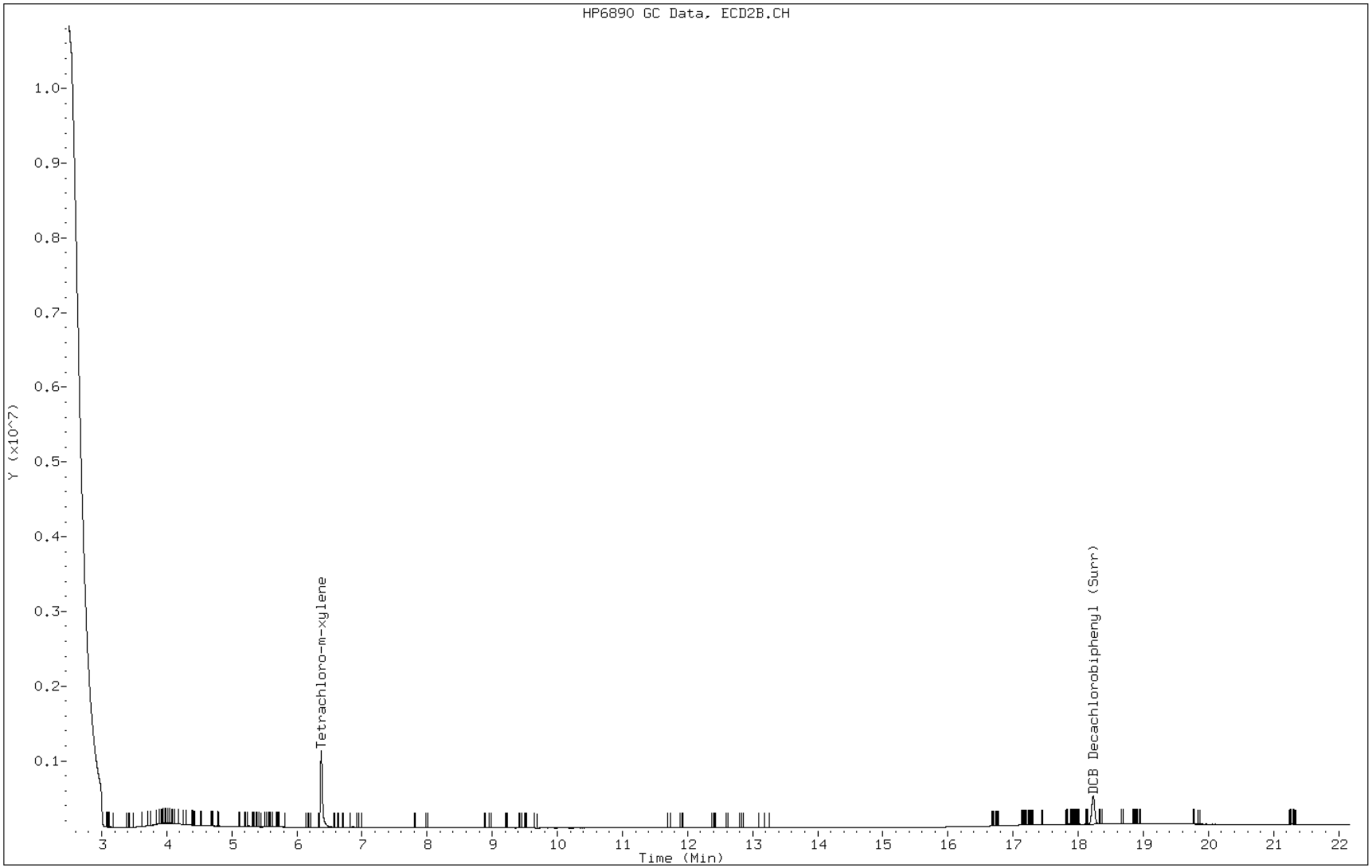
R - Spike/Surrogate failed recovery limits.

Data File: P1030668.D

Date: 20-OCT-2013 04:46

Client ID: Instrument: gc8.i

Sample Info: 10183B8082ALL.b Operator: 402360



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-86783/2-C

Matrix: Water | Lab File ID: P1030669.D

Analysis Method: 8082A | Date Collected:

Extraction Method: 3510C | Date Extracted: 10/15/2013 14:50

Sample wt/vol: 1000(mL) | Date Analyzed: 10/20/2013 05:15

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-1701 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	1.14		0.010	0.0025
11104-28-2	PCB-1221	ND		0.010	0.0025
11141-16-5	PCB-1232	ND		0.010	0.0029
53469-21-9	PCB-1242	ND		0.010	0.0019
12672-29-6	PCB-1248	ND		0.010	0.0023
11097-69-1	PCB-1254	ND		0.010	0.0023
11096-82-5	PCB-1260	1.14		0.010	0.0014
37324-23-5	PCB-1262	ND		0.010	0.0021
11100-14-4	PCB-1268	ND		0.010	0.0027

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	89		50-140
877-09-8	Tetrachloro-m-xylene	115		47-150

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030669.D
Report Date: 21-Oct-2013 08:00

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030669.D
Lab Smp Id: LCS 180-86783/2-C
Inj Date : 20-OCT-2013 05:15
Operator : 402360 Inst ID: gc8.i
Smp Info : 10193B8082ALL.b
Misc Info : LCS 180-86783/2-C
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\PCBBALL.m
Meth Date : 21-Oct-2013 07:53 guptaa Quant Type: ESTD
Cal Date : 15-OCT-2013 03:14 Cal File: P1030424.D
Als bottle: 46
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO	
$ 2 Tetrachloro-m-xylene					CAS #: 877-09-8			
6.374	6.389	-0.015	1066670	0.02296	0.022963			(R)
1 Aroclor-1221					CAS #: 11104-28-2			
Operator disabled compound identification.								
4 Aroclor-1016					CAS #: 12674-11-2			
7.399	7.400	-0.001	1562251	1.13087	1.1309	0.00- 0.00	0.00	
8.024	8.031	-0.007	2239138	1.32206	1.3220	100.00- 100.00	0.00	
8.376	8.383	-0.007	729049	1.06215	1.0622	223.51- 223.51	0.00	
8.937	8.938	-0.001	945620	1.09907	1.0991	223.51- 223.51	0.00	
9.664	9.664	0.000	735169	1.09043	1.0904	317.56- 317.56	0.00	
Average of Peak Concentrations =					1.1409			
3 Aroclor-1232					CAS #: 11141-16-5			
Operator disabled compound identification.								
6 Aroclor-1248					CAS #: 12672-29-6			
Operator disabled compound identification.								

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030669.D
Report Date: 21-Oct-2013 08:00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/L)	TARGET RANGE	RATIO
5 Aroclor-1242					CAS #: 53469-21-9		
Operator disabled compound identification.							
7 Aroclor-1254					CAS #: 11097-69-1		
Operator disabled compound identification.							
9 Aroclor-1262					CAS #: 37324-23-5		
Operator disabled compound identification.							
8 Aroclor-1260					CAS #: 11096-82-5		
11.370	11.399	-0.029	1579224	1.08909	1.0891	0.00- 0.00	0.00
11.914	11.942	-0.028	1793672	1.14126	1.1412	115.86- 115.86	0.00
12.791	12.818	-0.027	1847522	1.17989	1.1799	136.91- 136.91	0.00
13.813	13.842	-0.029	1183093	1.11695	1.1170	140.00- 140.00	0.00
14.633	14.664	-0.031	2613092	1.15233	1.1523	128.33- 128.33	0.00
Average of Peak Concentrations =					1.1359		
10 Aroclor-1268					CAS #: 11100-14-4		
Operator disabled compound identification.							
$ 11 DCB Decachlorobiphenyl (Surr)					CAS #: 2051-24-3		
18.231	18.246	-0.015	393038	0.01785	0.017846		(R)

QC Flag Legend

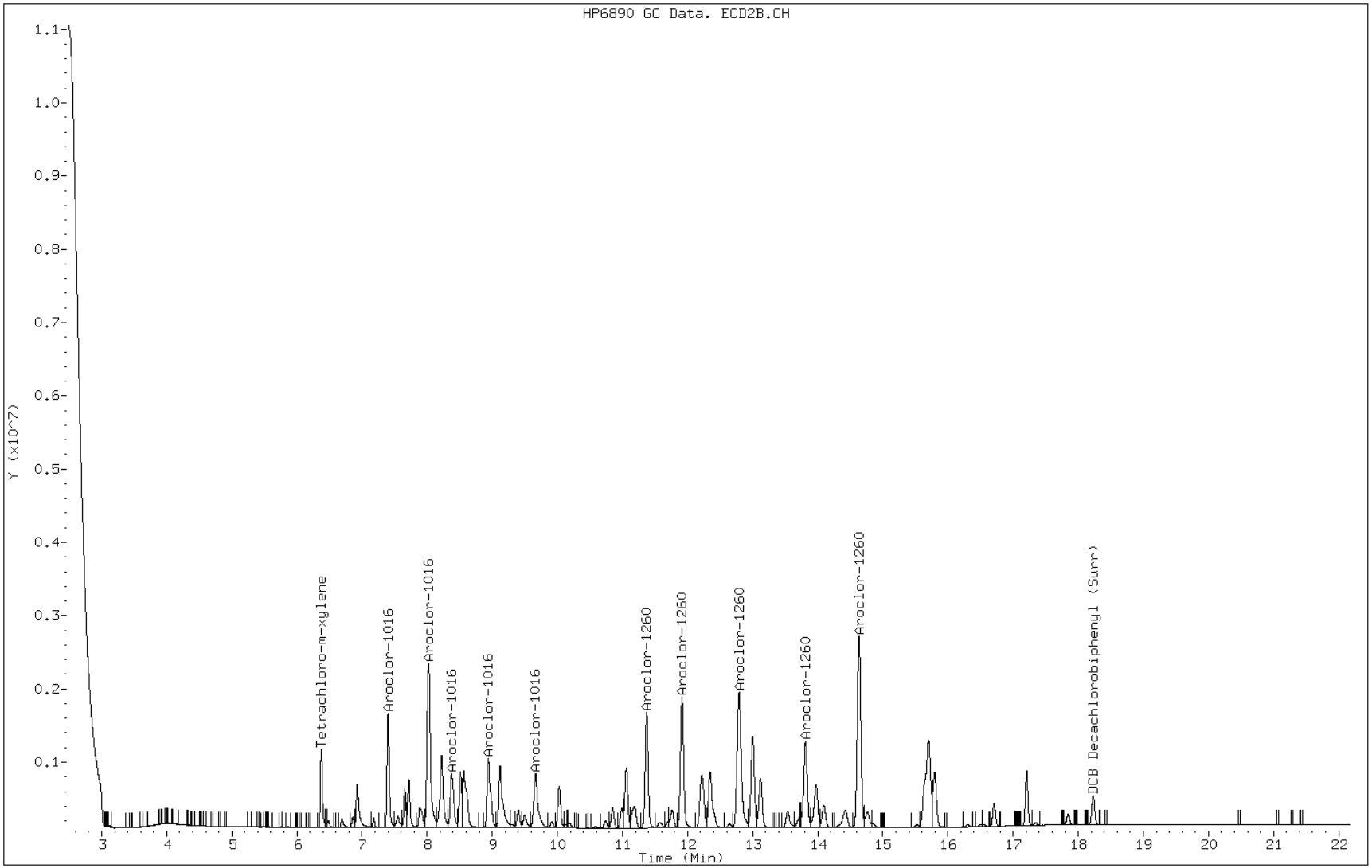
R - Spike/Surrogate failed recovery limits.

Data File: P1030669.D

Date: 20-OCT-2013 05:15

Client ID: Instrument: gc8.i

Sample Info: 10193B8082ALL.b Operator: 402360



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-02-20131009 MS Lab Sample ID: 180-26012-1 MS

Matrix: Water Lab File ID: P1030658.D

Analysis Method: 8082A Date Collected: 10/09/2013 11:15

Extraction Method: 3510C Date Extracted: 10/15/2013 14:50

Sample wt/vol: 1010(mL) Date Analyzed: 10/19/2013 23:54

Con. Extract Vol.: 1.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-1701 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 87359 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	1.02		0.0099	0.0025
11104-28-2	PCB-1221	ND		0.0099	0.0025
11141-16-5	PCB-1232	ND		0.0099	0.0029
53469-21-9	PCB-1242	ND		0.0099	0.0018
12672-29-6	PCB-1248	ND		0.0099	0.0023
11097-69-1	PCB-1254	ND		0.0099	0.0023
11096-82-5	PCB-1260	1.02		0.0099	0.0013
37324-23-5	PCB-1262	ND		0.0099	0.0020
11100-14-4	PCB-1268	ND		0.0099	0.0027

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	77		50-140
877-09-8	Tetrachloro-m-xylene	128		47-150

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030658.D
Report Date: 21-Oct-2013 07:55

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030658.D
Lab Smp Id: 180-26012-A-1-D MS
Inj Date : 19-OCT-2013 23:54
Operator : 402360 Inst ID: gc8.i
Smp Info : 10183B8082ALL.b
Misc Info : 180-26012-A-1-D MS
Comment   : 8082 PCB ANALYSIS
Method   : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\PCBBALL.m
Meth Date : 21-Oct-2013 07:53 guptaa Quant Type: ESTD
Cal Date : 15-OCT-2013 03:14 Cal File: P1030424.D
Als bottle: 35
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO	
$ 2 Tetrachloro-m-xylene					CAS #: 877-09-8			
6.371	6.389	-0.018	1190766	0.02563	0.025635			(R)
1 Aroclor-1221					CAS #: 11104-28-2			
Operator disabled compound identification.								
4 Aroclor-1016					CAS #: 12674-11-2			
7.399	7.400	-0.001	1483608	1.07394	1.0739	0.00- 0.00	0.00	
8.022	8.031	-0.009	2023250	1.19459	1.1946	100.00- 100.00	0.00	
8.370	8.383	-0.013	689076	1.00391	1.0039	223.51- 223.51	0.00	
8.934	8.938	-0.004	863219	1.00329	1.0033	223.51- 223.51	0.00	
9.664	9.664	0.000	606019	0.89887	0.89887	317.56- 317.56	0.00	
Average of Peak Concentrations = 1.0349								
3 Aroclor-1232					CAS #: 11141-16-5			
Operator disabled compound identification.								
6 Aroclor-1248					CAS #: 12672-29-6			
Operator disabled compound identification.								

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030658.D
Report Date: 21-Oct-2013 07:55

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
5 Aroclor-1242					CAS #: 53469-21-9		
Operator disabled compound identification.							
7 Aroclor-1254					CAS #: 11097-69-1		
Operator disabled compound identification.							
9 Aroclor-1262					CAS #: 37324-23-5		
Operator disabled compound identification.							
8 Aroclor-1260					CAS #: 11096-82-5		
11.369	11.399	-0.030	1433125	0.98833	0.98833	0.00- 0.00	0.00
11.913	11.942	-0.029	1659801	1.05608	1.0561	115.86- 115.86	0.00
12.788	12.818	-0.030	1667262	1.06477	1.0648	136.91- 136.91	0.00
13.813	13.842	-0.029	1040736	0.98255	0.98255	140.00- 140.00	0.00
14.634	14.664	-0.030	2358750	1.04017	1.0402	128.33- 128.33	0.00
Average of Peak Concentrations =					1.0264		
10 Aroclor-1268					CAS #: 11100-14-4		
Operator disabled compound identification.							
$ 11 DCB Decachlorobiphenyl (Surr)					CAS #: 2051-24-3		
18.233	18.246	-0.013	342085	0.01553	0.015532		(R)

QC Flag Legend

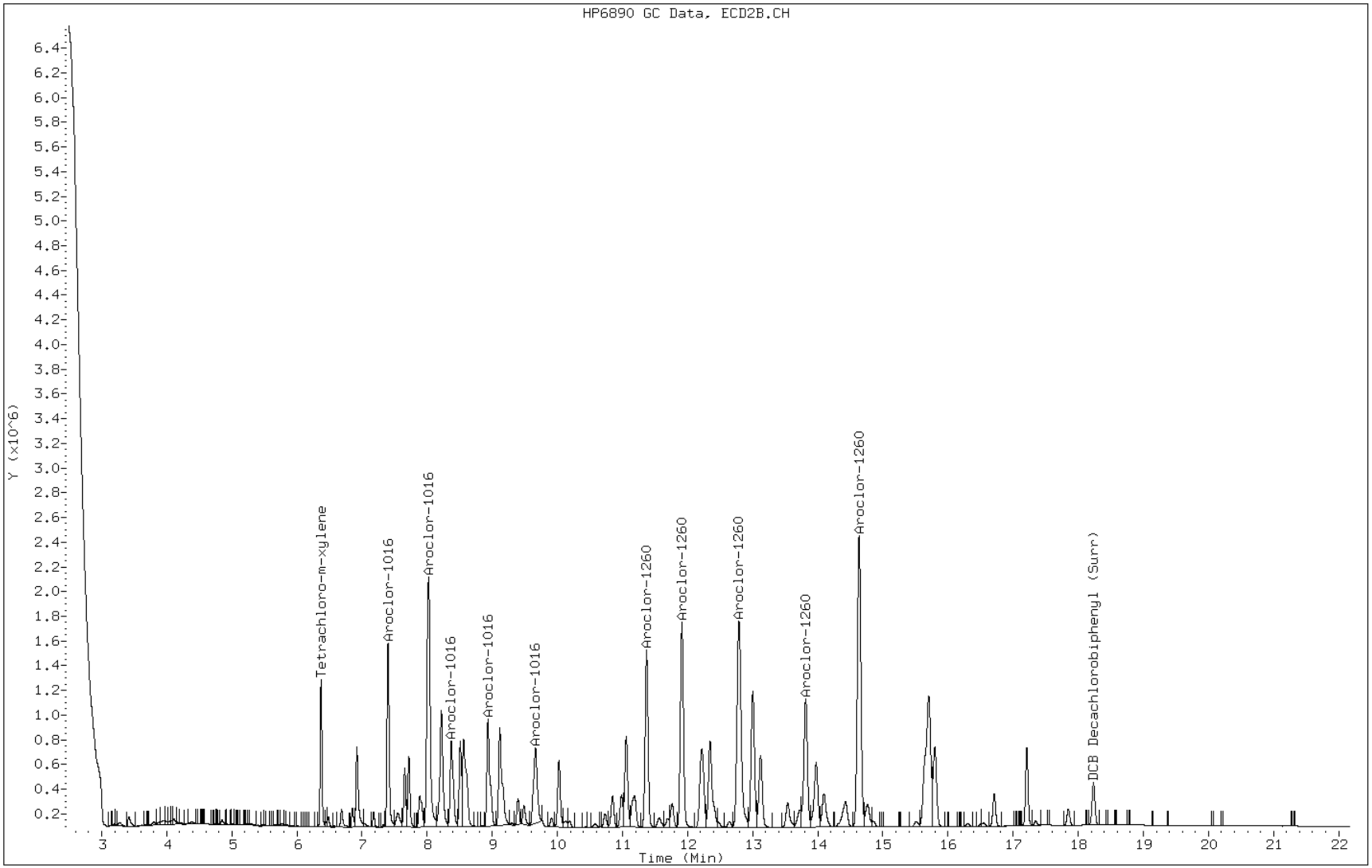
R - Spike/Surrogate failed recovery limits.

Data File: P1030658.D

Date: 19-OCT-2013 23:54

Client ID: Instrument: gc8.i

Sample Info: 10183B8082ALL.b Operator: 402360



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-02-20131009 MSD | Lab Sample ID: 180-26012-1 MSD

Matrix: Water | Lab File ID: P1030659.D

Analysis Method: 8082A | Date Collected: 10/09/2013 11:15

Extraction Method: 3510C | Date Extracted: 10/15/2013 14:50

Sample wt/vol: 1010(mL) | Date Analyzed: 10/20/2013 00:23

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-1701 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	1.13		0.0099	0.0025
11104-28-2	PCB-1221	ND		0.0099	0.0025
11141-16-5	PCB-1232	ND		0.0099	0.0029
53469-21-9	PCB-1242	ND		0.0099	0.0018
12672-29-6	PCB-1248	ND		0.0099	0.0023
11097-69-1	PCB-1254	ND		0.0099	0.0023
11096-82-5	PCB-1260	1.12		0.0099	0.0013
37324-23-5	PCB-1262	ND		0.0099	0.0020
11100-14-4	PCB-1268	ND		0.0099	0.0027

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	86		50-140
877-09-8	Tetrachloro-m-xylene	141		47-150

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030659.D
Report Date: 21-Oct-2013 07:55

TA Pittsburgh

Data file : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030659.D
Lab Smp Id: 180-26012-C-1-C MSD
Inj Date : 20-OCT-2013 00:23
Operator : 402360 Inst ID: gc8.i
Smp Info : 10193B8082ALL.b
Misc Info : 180-26012-C-1-C MSD
Comment : 8082 PCB ANALYSIS
Method : \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\PCBBALL.m
Meth Date : 21-Oct-2013 07:53 guptaa Quant Type: ESTD
Cal Date : 15-OCT-2013 03:14 Cal File: P1030424.D
Als bottle: 36
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: PITPC-126

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/L)	TARGET RANGE	RATIO
$ 2 Tetrachloro-m-xylene					CAS #: 877-09-8		
6.369	6.389	-0.020	1311345	0.02823	0.028231		(R)
1 Aroclor-1221					CAS #: 11104-28-2		
Operator disabled compound identification.							
4 Aroclor-1016					CAS #: 12674-11-2		
7.396	7.400	-0.004	1624381	1.17585	1.1758	0.00- 0.00	0.00
8.020	8.031	-0.011	2156564	1.27331	1.2733	100.00- 100.00	0.00
8.368	8.383	-0.015	769100	1.12050	1.1205	223.51- 223.51	0.00
8.933	8.938	-0.005	951454	1.10585	1.1058	223.51- 223.51	0.00
9.664	9.664	0.000	678627	1.00656	1.0066	317.56- 317.56	0.00
Average of Peak Concentrations =					1.1364		
3 Aroclor-1232					CAS #: 11141-16-5		
Operator disabled compound identification.							
6 Aroclor-1248					CAS #: 12672-29-6		
Operator disabled compound identification.							

Data File: \\pitsvr06\d\chem\gc8.i\10183B8082ALL.b\P1030659.D
Report Date: 21-Oct-2013 07:55

				CONCENTRATIONS ON-COL (ng)	FINAL (ug/L)	TARGET RANGE	RATIO
RT	EXP RT	DLT RT	RESPONSE				
5 Aroclor-1242					CAS #: 53469-21-9		

Peaks not detected for Quant. or Qual. signal(s).

---

7 Aroclor-1254					CAS #: 11097-69-1		

Operator disabled compound identification.

---

9 Aroclor-1262					CAS #: 37324-23-5		

Operator disabled compound identification.

---

8 Aroclor-1260					CAS #: 11096-82-5		
11.369	11.399	-0.030	1568769	1.08188	1.0819	0.00- 0.00	0.00
11.912	11.942	-0.030	1809810	1.15152	1.1515	115.86- 115.86	0.00
12.788	12.818	-0.030	1836548	1.17288	1.1729	136.91- 136.91	0.00
13.812	13.842	-0.030	1148429	1.08423	1.0842	140.00- 140.00	0.00
14.634	14.664	-0.030	2608488	1.15030	1.1503	128.33- 128.33	0.00
		Average of Peak Concentrations =			1.1282		

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10 Aroclor-1268					CAS #: 11100-14-4		

Operator disabled compound identification.

$ 11 DCB Decachlorobiphenyl (Surr)					CAS #: 2051-24-3		
18.234	18.246	-0.012	378854	0.01720	0.017202		(R)

QC Flag Legend

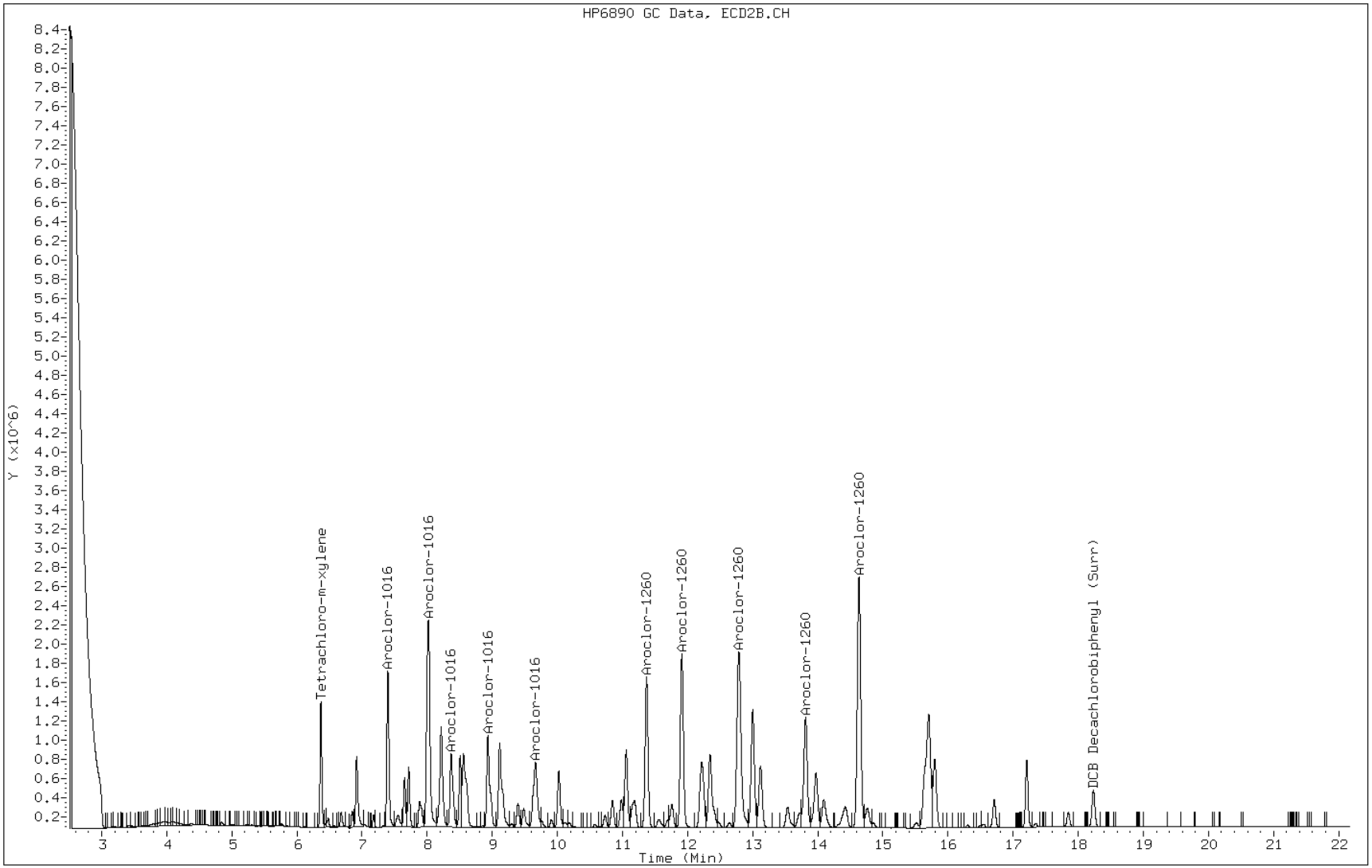
R - Spike/Surrogate failed recovery limits.

Data File: P1030659.D

Date: 20-OCT-2013 00:23

Client ID: Instrument: gc8.i

Sample Info: 10193B8082ALL.b Operator: 402360



GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: GC8 Start Date: 10/14/2013 15:33

Analysis Batch Number: 86759 End Date: 10/15/2013 15:32

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 180-86759/1		10/14/2013 15:33	1	P1030400.D	RTX-1701 0.53(mm)
IC 180-86759/2		10/14/2013 16:02	1	P1030401.D	RTX-1701 0.53(mm)
IC 180-86759/3		10/14/2013 16:32	1	P1030402.D	RTX-1701 0.53(mm)
IC 180-86759/4		10/14/2013 17:01	1	P1030403.D	RTX-1701 0.53(mm)
IC 180-86759/5		10/14/2013 17:30	1	P1030404.D	RTX-1701 0.53(mm)
IC 180-86759/6		10/14/2013 17:59	1	P1030405.D	RTX-1701 0.53(mm)
IC 180-86759/7		10/14/2013 18:29	1	P1030406.D	RTX-1701 0.53(mm)
IC 180-86759/8		10/14/2013 18:58	1	P1030407.D	RTX-1701 0.53(mm)
IC 180-86759/9		10/14/2013 19:27	1	P1030408.D	RTX-1701 0.53(mm)
IC 180-86759/10		10/14/2013 19:56	1	P1030409.D	RTX-1701 0.53(mm)
IC 180-86759/11		10/14/2013 20:25	1	P1030410.D	RTX-1701 0.53(mm)
IC 180-86759/12		10/14/2013 20:55	1	P1030411.D	RTX-1701 0.53(mm)
IC 180-86759/13		10/14/2013 21:24	1	P1030412.D	RTX-1701 0.53(mm)
IC 180-86759/14		10/14/2013 21:53	1	P1030413.D	RTX-1701 0.53(mm)
IC 180-86759/15		10/14/2013 22:22	1	P1030414.D	RTX-1701 0.53(mm)
IC 180-86759/16		10/14/2013 22:52	1	P1030415.D	RTX-1701 0.53(mm)
IC 180-86759/17		10/14/2013 23:21	1	P1030416.D	RTX-1701 0.53(mm)
IC 180-86759/18		10/14/2013 23:50	1	P1030417.D	RTX-1701 0.53(mm)
IC 180-86759/19		10/15/2013 00:19	1	P1030418.D	RTX-1701 0.53(mm)
IC 180-86759/20		10/15/2013 00:48	1	P1030419.D	RTX-1701 0.53(mm)
IC 180-86759/21		10/15/2013 01:17	1	P1030420.D	RTX-1701 0.53(mm)
ICRT 180-86759/22		10/15/2013 01:47	1	P1030421.D	RTX-1701 0.53(mm)
IC 180-86759/23		10/15/2013 02:16	1	P1030422.D	RTX-1701 0.53(mm)
IC 180-86759/24		10/15/2013 02:45	1	P1030423.D	RTX-1701 0.53(mm)
IC 180-86759/25		10/15/2013 03:14	1	P1030424.D	RTX-1701 0.53(mm)
ICV 180-86759/26		10/15/2013 03:43	1	P1030425.D	RTX-1701 0.53(mm)
ICV 180-86759/27		10/15/2013 04:13	1	P1030426.D	RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 04:42	1		RTX-1701 0.53(mm)
ICV 180-86759/29		10/15/2013 05:11	1	P1030428.D	RTX-1701 0.53(mm)
ICV 180-86759/30		10/15/2013 05:40	1	P1030429.D	RTX-1701 0.53(mm)
ICV 180-86759/31		10/15/2013 06:09	1	P1030430.D	RTX-1701 0.53(mm)
ICV 180-86759/32		10/15/2013 06:38	1	P1030431.D	RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 07:08	10		RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 07:37	10		RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 08:06	10		RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 08:35	10		RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 09:05	10		RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 09:34	10		RTX-1701 0.53(mm)
ICV 180-86759/38		10/15/2013 10:03	1	P1030438.D	RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 10:32	10		RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 11:02	10		RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 11:31	10		RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 12:00	10		RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 12:29	10		RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 12:59	10		RTX-1701 0.53(mm)

8082A

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: GC8 Start Date: 10/14/2013 15:33

Analysis Batch Number: 86759 End Date: 10/15/2013 15:32

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		10/15/2013 13:28	10		RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 13:57	1		RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 14:26	1		RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 15:03	1		RTX-1701 0.53(mm)
CCV 180-86759/49		10/15/2013 15:32	1		RTX-1701 0.53(mm)

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: GC8 Start Date: 10/17/2013 14:07

Analysis Batch Number: 87359 End Date: 10/21/2013 12:51

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 180-87359/1		10/17/2013 14:07	1	P1030540.D	RTX-1701 0.53(mm)
CCV 180-87359/2		10/17/2013 15:06	1	P1030542.D	RTX-1701 0.53(mm)
CCV 180-87359/3		10/17/2013 15:35	1	P1030543.D	RTX-1701 0.53(mm)
CCV 180-87359/4		10/17/2013 16:05	1	P1030544.D	RTX-1701 0.53(mm)
CCV 180-87359/5		10/17/2013 16:34	1	P1030545.D	RTX-1701 0.53(mm)
CCV 180-87359/6		10/17/2013 17:03	1	P1030546.D	RTX-1701 0.53(mm)
CCV 180-87359/7		10/17/2013 17:33	1	P1030547.D	RTX-1701 0.53(mm)
CCVRT 180-87359/8		10/19/2013 22:56	1	P1030656.D	RTX-1701 0.53(mm)
180-26012-1	MB-MW-02-20131009	10/19/2013 23:25	1	P1030657.D	RTX-1701 0.53(mm)
180-26012-1 MS	MB-MW-02-20131009 MS	10/19/2013 23:54	1	P1030658.D	RTX-1701 0.53(mm)
180-26012-1 MSD	MB-MW-02-20131009 MSD	10/20/2013 00:23	1	P1030659.D	RTX-1701 0.53(mm)
180-26012-3	MB-MW-03-20131009	10/20/2013 01:22	1	P1030661.D	RTX-1701 0.53(mm)
180-26012-4	MB-EB-20131009	10/20/2013 01:51	1	P1030662.D	RTX-1701 0.53(mm)
180-26012-7	DUP-20131009	10/20/2013 03:19	1	P1030665.D	RTX-1701 0.53(mm)
180-26012-8	MB-MW-05-20131010	10/20/2013 03:48	1	P1030666.D	RTX-1701 0.53(mm)
180-26012-9	MB-EB-20131010	10/20/2013 04:17	1	P1030667.D	RTX-1701 0.53(mm)
MB 180-86783/1-C		10/20/2013 04:46	1	P1030668.D	RTX-1701 0.53(mm)
LCS 180-86783/2-C		10/20/2013 05:15	1	P1030669.D	RTX-1701 0.53(mm)
CCV 180-87359/19		10/20/2013 05:45	1	P1030670.D	RTX-1701 0.53(mm)
CCV 180-87359/20		10/21/2013 09:55	1	P1030720.D	RTX-1701 0.53(mm)
180-26012-2	MB-MW-01-20131009	10/21/2013 10:24	1	P1030721.D	RTX-1701 0.53(mm)
180-26012-5	MB-MW-04-20131009	10/21/2013 10:54	1	P1030722.D	RTX-1701 0.53(mm)
180-26012-6	MB-MW-06-20131010	10/21/2013 11:23	1	P1030723.D	RTX-1701 0.53(mm)
CCV 180-87359/24		10/21/2013 12:51	1	P1030726.D	RTX-1701 0.53(mm)

GC SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Batch Number: 86783 Batch Start Date: 10/15/13 14:50 Batch Analyst: Yushinski, Charles

Batch Method: 3510C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ReceivedpH	InitialAmount	FinalAmount	GCMATRIXWORKS 00008	op-p/pcb sur 00009	
MB 180-86783/1		3510C, 3660B, 3665A, 8082A		6	1000 mL	1.0 mL		25 uL	
LCS 180-86783/2		3510C, 3660B, 3665A, 8082A		6	1000 mL	1.0 mL	25 uL	25 uL	
180-26012-D-1	MB-MW-02-20131009	3510C, 3660B, 3665A, 8082A	T	7	1060 mL	1.0 mL		25 uL	
180-26012-A-1 MS	MB-MW-02-20131009	3510C, 3660B, 3665A, 8082A	T	7	1010 mL	1.0 mL	25 uL	25 uL	
180-26012-C-1 MSD	MB-MW-02-20131009	3510C, 3660B, 3665A, 8082A	T	7	1010 mL	1.0 mL	25 uL	25 uL	
180-26012-D-2	MB-MW-01-20131009	3510C, 3660B, 3665A, 8082A	T	7	1050 mL	1.0 mL		25 uL	
180-26012-D-3	MB-MW-03-20131009	3510C, 3660B, 3665A, 8082A	T	7	1050 mL	1.0 mL		25 uL	
180-26012-C-4	MB-EB-20131009	3510C, 3660B, 3665A, 8082A	T	5	1050 mL	1.0 mL		25 uL	
180-26012-D-5	MB-MW-04-20131009	3510C, 3660B, 3665A, 8082A	T	7	1060 mL	1.0 mL		25 uL	
180-26012-C-7	DUP-20131009	3510C, 3660B, 3665A, 8082A	T	7	1040 mL	1.0 mL		25 uL	
180-26012-D-6	MB-MW-06-20131010	3510C, 3660B, 3665A, 8082A	T	7	1060 mL	1.0 mL		25 uL	
180-26012-A-8	MB-MW-05-20131010	3510C, 3660B, 3665A, 8082A	T	7	1050 mL	1.0 mL		25 uL	
180-26012-D-9	MB-EB-20131010	3510C, 3660B, 3665A, 8082A	T	5	1060 mL	1.0 mL		25 uL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Batch Number: 86783 Batch Start Date: 10/15/13 14:50 Batch Analyst: Yushinski, Charles

Batch Method: 3510C Batch End Date:

Batch Notes	
Exchange Solvent Lot #	963970
Exchange Solvent Name	Hexane
N-evap #	1
N-evap temperature	21 Celsius
Na2SO4 Lot Number	965232
Oven, Bath or Block Temperature 1	79 Celsius
Prep Solvent Lot #	984624
Prep Solvent Name	Methylene chloride
Prep Solvent Volume Used	180 mL
Person's name who did the prep	CBY
Sufficient volume for MS/MSD?	yes
Uncorrected N-evap Temperature	21 Celsius
Uncorrected Temperature	79 Celsius

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Batch Number: 86887 Batch Start Date: 10/16/13 13:05 Batch Analyst: Gupta, Ashok

Batch Method: 3660B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	GCTBASOLUTION 00013			
MB 180-86783/1-A		3660B, 3665A, 8082A		2 mL	2 mL	2 mL			
LCS 180-86783/2-A		3660B, 3665A, 8082A		2 mL	2 mL	2 mL			
180-26012-D-1-A	MB-MW-02-20131009	3660B, 3665A, 8082A	T	2 mL	2 mL	2 mL			
180-26012-A-1-A MS	MB-MW-02-20131009	3660B, 3665A, 8082A	T	2 mL	2 mL	2 mL			
180-26012-C-1-A MSD	MB-MW-02-20131009	3660B, 3665A, 8082A	T	2 mL	2 mL	2 mL			
180-26012-D-2-A	MB-MW-01-20131009	3660B, 3665A, 8082A	T	2 mL	2 mL	2 mL			
180-26012-D-3-A	MB-MW-03-20131009	3660B, 3665A, 8082A	T	2 mL	2 mL	2 mL			
180-26012-C-4-A	MB-EB-20131009	3660B, 3665A, 8082A	T	2 mL	2 mL	2 mL			
180-26012-D-5-A	MB-MW-04-20131009	3660B, 3665A, 8082A	T	2 mL	2 mL	2 mL			
180-26012-C-7-A	DUP-20131009	3660B, 3665A, 8082A	T	2 mL	2 mL	2 mL			
180-26012-D-6-A	MB-MW-06-20131010	3660B, 3665A, 8082A	T	2 mL	2 mL	2 mL			
180-26012-A-8-A	MB-MW-05-20131010	3660B, 3665A, 8082A	T	2 mL	2 mL	2 mL			
180-26012-D-9-A	MB-EB-20131010	3660B, 3665A, 8082A	T	2 mL	2 mL	2 mL			

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Batch Number: 86888 Batch Start Date: 10/16/13 13:08 Batch Analyst: Gupta, Ashok

Batch Method: 3665A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
MB 180-86783/1-B		3665A, 8082A		2 mL	2 mL				
LCS 180-86783/2-B		3665A, 8082A		2 mL	2 mL				
180-26012-D-1-B	MB-MW-02-20131009	3665A, 8082A	T	2 mL	2 mL				
180-26012-A-1-C MS	MB-MW-02-20131009	3665A, 8082A	T	2 mL	2 mL				
180-26012-C-1-B MSD	MB-MW-02-20131009	3665A, 8082A	T	2 mL	2 mL				
180-26012-D-2-B	MB-MW-01-20131009	3665A, 8082A	T	2 mL	2 mL				
180-26012-D-3-B	MB-MW-03-20131009	3665A, 8082A	T	2 mL	2 mL				
180-26012-C-4-B	MB-EB-20131009	3665A, 8082A	T	2 mL	2 mL				
180-26012-D-5-B	MB-MW-04-20131009	3665A, 8082A	T	2 mL	2 mL				
180-26012-C-7-B	DUP-20131009	3665A, 8082A	T	2 mL	2 mL				
180-26012-D-6-B	MB-MW-06-20131010	3665A, 8082A	T	2 mL	2 mL				
180-26012-A-8-B	MB-MW-05-20131010	3665A, 8082A	T	2 mL	2 mL				
180-26012-D-9-B	MB-EB-20131010	3665A, 8082A	T	2 mL	2 mL				

Batch Notes	
Batch Comment	H2SO4 lot# 32783 is used for cleanup.

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice) M. McConnell	Samplers Name (Printed) M. McConnell	Site/Project Identification Metal Bank
Company ENVIRON	P. O. # ~~333105~~ 3331508H	State (Location of site): NJ: ☐ NY: ☐ Other: PA
Address 1760 Market Street, Suite 1000	Analysis Turnaround Time: Standard ☒	Regulatory Program:
City Philadelphia State PA	Rush Chrages Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	LAB USE ONLY Project No:
Phone (215) 523-5601 Fax		Job No:

ANALYSIS REQUESTED

180-26012 Chain of Custody

Sample Identification	Date	Time	Matrix	No. of Cont.	SVOCs	PCB Aroclors	Sample Numbers
MB-MW-02-20131009	10/9/13	1115	GW	4	X	X	SEND TO TA PITTSBURGH
MB-MW-02-20131009	10/9/13	1115					
MB-MW-02-MSD-20131009	10/9/13	1115					
MB-MW-01-20131009	"	1300					
MB-MW-03-20131009	"	1405					
MB-EB-20131009	"	1530	Bin GW				
MB-MW-04-20131009	"	1052					
MB-MW-06-20131010	10/10/13	0810					
DUP-20131009	10/9/13						
MB-MW-05-20131010	10/10/13	0955					

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH — Soil:

6 = Other _____, 7 = Other _____ — Water:

Special Instructions Water Metals Filtered (Yes/No)? _____

	Company	Date / Time		Company
Relinquished by: Erin Mayfield		10/11/13 10:41	Received by: 1)	TA
Relinquished by: 2)		10/11/13 1200	Received by: 2)	TA
Relinquished by: 3)	TA	10/11/13 1700	Received by: 3) Fed Ex	
Relinquished by: 4)		10/12/13 900	Received by: 4)	p.7 TA

#811203 - 811207

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice): M. McConnell	Samplers Name (Printed): M. McConnell	Site/Project Identification: Metal Bank
Company: ENVIRON	P. O. #: 333150871	State (Location of site): NJ: ☐ NY: ☐ Other: PA
Address: 1760 Market Street, Suite 1000	Analysis Turnaround Time: Standard ☒	Regulatory Program:
City: Philadelphia State: PA	Rush Chrages Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	
Phone: 215 523-5601 Fax:		

Sample Identification	Date	Time	Matrix	No. of Cont.	SVOCs	PCB Aroclors								LAB USE ONLY Project No: / Job No: / Sample Numbers
MB-ER-20131010	10/10/13	0900	BW	4	X	X								SEND TO TEST AMERICA PITTSBURGH

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH — Soil: / Water:

6 = Other _____, 7 = Other _____

Special Instructions Water Metals Filtered (Yes/No)? _____

	Relinquished by	Company	Date / Time	Received by	Company
1)	Erin Mayfield		10/11/13 10:41		
2)			10/11/13 1200		
3)			10/11/13 1700	Fed Ex	
4)			10/12/13 900		

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0408)

Massachusetts (M-NJ312), North Carolina (No. 578)

811203 - 811207

From: (856) 334-1030
Katherine Harrelson
TestAmerica South Jersey
3000 Drive East
Suite A
MARLTON, NJ 08053

Origin ID: KOTA

FedEx Express

J13201306280326

Ship Date: 11OCT13
ActWgt: 55.0 LB
CAD: 1084353/INET3430

Delivery Address Bar Code

Ref #
Invoice #
PO #
Dept #

180-26012 Waybill

SHIP TO: (412) 963-7058 BILL RECIPIENT

Sample Receiving
Test America Pittsburgh
301 ALPHA DR

PITTSBURGH, PA 15238

2 of 5

SATURDAY 12:00P
PRIORITY OVERNIGHT

MPS# 7968 9451 3932
0263

Mstr# 7968 9451 3645 0201

15238
PA-US
PIT

X0 AGCA

rrected temp
nometer ID 4 Initials DW

4.3 / 3 °C

01 effective 7/26/13

51AG1/AB1B/1A9E

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From: (856) 334-1030
Katherine Harrelson
TestAmerica South Jersey
3000 Drive East
Suite A
MARLTON, NJ 08053

Origin ID: KOTA

FedEx Express

J13201306280326

Ship Date: 11OCT13
ActWgt: 50.0 LB
CAD: 1084353/INET3430

Delivery Address Bar Code

Ref #
Invoice #
PO #
Dept #

SHIP TO: (412) 963-7058 BILL RECIPIENT

Sample Receiving
Test America Pittsburgh
301 ALPHA DR

PITTSBURGH, PA 15238

4 of 5

MPS# 7968 9451 4089
0263

Mstr# 7968 9451 3645 0201

X0 AGCA

SATURDAY 12:00P
PRIORITY OVERNIGHT

15238
PA-US
PIT

Uncorrected temp
Thermometer ID
CF 1.1
Initials
PT-WI-SR-001 effective 7/26/13

24.3 °C
DW

51AG1/AB1B/1A9E

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From: (856) 334-1030
Katherine Harrelson
TestAmerica South Jersey
3000 Drive East
Suite A
MARLTON, NJ 08053

Origin ID: KOTA

FedEx Express

J13201306280326

Ship Date: 11OCT13
ActWgt: 50.0 LB
CAD: 1084353/INET3430

Delivery Address Bar Code

Ref #
Invoice #
PO #
Dept #

SHIP TO: (412) 963-7058 BILL RECIPIENT

Sample Receiving
Test America Pittsburgh
301 ALPHA DR

PITTSBURGH, PA 15238

3 of 5

MPS# 7968 9451 4078
0263

Mstr# 7968 9451 3645 0201

X0 AGCA

SATURDAY 12:00P
PRIORITY OVERNIGHT

15238
PA-US
PIT

Uncorrected temp 16.3 °C
Thermometer ID 3
CF -.4 Initials DW

PT-WI-SR-001 effective 7/26/13

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From: (856) 334-1030
Katherine Harrelson
TestAmerica South Jersey
3000 Drive East
Suite A
MARLTON, NJ 08053

Origin ID: KOTA

FedEx Express

J13201306280326

Ship Date: 11OCT13
ActWgt: 50.0 LB
CAD: 1084353/INET3430

Delivery Address Bar Code

Ref #
Invoice #
PO #
Dept #

SHIP TO: (412) 963-7058 BILL RECIPIENT

Sample Receiving
Test America Pittsburgh
301 ALPHA DR

PITTSBURGH, PA 15238

5 of 5

MPS# 7968 9451 3520
0263

Mstr# 7968 9451 3645 0201

X0 AGCA

SATURDAY 12:00P
PRIORITY OVERNIGHT

15238
PA-US
PIT

Uncorrected temp 3.0 °C
Thermometer ID #3

CF -.4 Initials M.L.

PT-WI-SR-001 effective 7/26/13

51AG1/AB1B/1A9E

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From: (856) 334-1030
Katherine Harrelson
TestAmerica South Jersey
3000 Drive East
Suite A
MARLTON, NJ 08053

Origin ID: KOTA

FedEx Express

J13201306280326

Ship Date: 11OCT13
ActWgt: 60.0 LB
CAD: 1084353/INET3430

Delivery Address Bar Code

Ref #
Invoice #
PO #
Dept #

SHIP TO: (412) 963-7058 BILL RECIPIENT

Sample Receiving
Test America Pittsburgh
301 ALPHA DR

PITTSBURGH, PA 15238

1 of 5

SATURDAY 12:00P
PRIORITY OVERNIGHT

TRK# 7968 9451 3645
0201

MASTER

X0 AGCA

15238
PA-US
PIT

Uncorrected temp 3.5 °C
Thermometer ID -.4
CF -.4 Initials KL

PT-WI-SR-001 effective 7/26/13

51AG1/AB1B/1A9E

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Login Sample Receipt Checklist

Client: ENVIRON International Corp.

Job Number: 180-26012-1

Login Number: 26012

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: Watson, Debbie

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Appendix B

Groundwater Sampling Validation Reports

ENVIRONMENTAL® STANDARDS

Setting the Standards for Innovative Environmental Solutions

June 5, 2013

Ms. Jessica Penetar
ENVIRON
214 Carnegie Center
Princeton, NJ 08540

Dear Ms. Penetar:

Enclosed is the quality assurance review of the analytical data for the aqueous samples collected on April 10 and 11, 2013, at the Metal Bank Superfund Site. Based on this quality assurance review, the result for 3,3′-dichlorobenzidine in one sample was qualified as unusable due to very low matrix spike/matrix spike duplicate recoveries. A portion of the organic data was qualified as estimated due to field duplicate precision, low matrix spike/matrix spike duplicate recoveries, and reported positive results between the method detection limit and reporting limit. A result was qualified as unusable due to very low matrix spike/matrix spike duplicate recoveries. Overall, the data are usable with the qualification presented in this review.

If you have any questions or comments, or if we can be of any further assistance, please feel free to call.

Sincerely,

Diana Chan
Quality Assurance Chemist

Sincerely,

Rock J. Vitale, CEAC
Technical Director of Chemistry/
Principal

DC/RJV:sc
Enc.

1140 Valley Forge Road P.O. Box 810 Valley Forge, PA 19482 Tel: 610.935.5577 Fax: 610.935.5583 Web: www.envstd.com

ENVIRONMENTAL® STANDARDS

Setting the Standards for Innovative Environmental Solutions

QUALITY ASSURANCE REVIEW OF THE AQUEOUS SAMPLES COLLECTED ON APRIL 10 AND 11, 2012 FOR METAL BANK SUPERFUND SITE

June 5, 2013

Prepared for:

ENVIRON
214 Carnegie Center
Princeton, NJ 08540

Prepared by:

ENVIRONMENTAL STANDARDS, INC.
1140 Valley Forge Road
P.O. Box 810
Valley Forge, PA 19482-0810

TABLE OF CONTENTS

Introduction

This quality assurance (QA) review is based upon an examination of the organic data generated from the analyses of the aqueous samples collected on April 10 and 11, 2013, at the Metal Bank Superfund Site. The samples included in this QA review are presented on Table 1. The laboratory was requested to prepare a detailed data package to substantiate the reported analytical results. The data package that was prepared allowed for a comprehensive review to be performed.

This review has been performed with the guidance from the US EPA "Innovative Approaches to Data Validation" (Region III, June 1995) Level M3 data validation; "US EPA Contract Laboratory Program National Functional Guidelines for Organic Data Review" (US EPA, October 1999); and "Metal Bank National Priority Site Quality Assurance Project Plan Groundwater" (QAPP, May 2010).

The reported analytical results are presented in Section 2. Data were examined to determine the usability of the analytical results and compliance relative to the analytical requirements specified by US EPA and "Test Methods for Evaluating Solid Waste Physical/Chemical Methods," SW-846, 3rd Edition (SW-846) methodology. Qualifier codes have been placed next to the results to enable the data user to quickly assess the qualitative and/or quantitative reliability of any result. Details of this QA review are presented in Section 1 of this report. This report was prepared to provide a critical review of the laboratory analyses and reported analytical results. Rigorous QA reviews of laboratory-generated data routinely identify various problems associated with analytical measurements, even from the most experienced and capable laboratories. The nature and extent of problems identified in this critical review should not be interpreted to mean that those results that do not have qualifier codes are less than valid.

TABLE 1

SAMPLES THAT HAVE UNDERGONE A RIGOROUS

QUALITY ASSURANCE REVIEW

Client Sample Identification	Laboratory Sample Identifications	Matrix	Date Sample Collected	Parameters Examined
MB-MW-01-20130410	180-20360-1	Aq	4/10/13	SVOA, PCB
MB-MW-02-20130410	180-20360-2	Aq	4/10/13	SVOA, PCB
MB-MW-02-MS-20130410 (Matrix Spike)	180-20360-2MS	Aq	4/10/13	SVOA, PCB
MB-MW-02-MSD-20130410 (Matrix Spike Duplicate)	180-20360-2MSD	Aq	4/10/13	SVOA, PCB
MB-MW-03-20130410	180-20360-3	Aq	4/10/13	SVOA, PCB
MB-MW-04-20130410	180-20360-4	Aq	4/10/13	SVOA, PCB
MB-MW-05-20130411	180-20360-5	Aq	4/11/13	SVOA, PCB
MB-MW-06-20130411	180-20360-6	Aq	4/11/13	SVOA, PCB
DUP-20130410 (Field Duplicate of MB-MW-04-20130410)	180-20360-7	Aq	4/10/13	SVOA, PCB
MB-FB-20130410 (Field Blank)	180-20360-8	Aq	4/10/13	SVOA, PCB
MB-FB-20130411 (Field Blank)	180-20360-9	Aq	4/11/13	SVOA, PCB

NOTES:

PCB - PCBs as Aroclors by SW-846 Method 8082A. (11 analyses)
SVOA - Semivolatile Organic Compounds by SW-846 Method 8270D. (11 analyses)
Aq - Aqueous.

Section 1 Quality Assurance Review

A. Organic Data

The organic analyses of 11 aqueous samples (including equipment blanks and quality control [QC] samples) were performed by TestAmerica Laboratories, Inc. in Pittsburgh, Pennsylvania (TestAmerica Pittsburgh) and TestAmerica Laboratories, Inc. in Edison, New Jersey (TestAmerica Edison). All samples were analyzed for PCBs as Aroclors by SW-846 Method 8082A and for semivolatile organic compounds by SW-846 Method 8270D. The analyses are specified on Table 1 and the analytical results are summarized in Section 2 of this report.

The findings offered in this report are based on a review of the holding times, condition of samples upon laboratory receipt, gas chromatogram/mass spectral (GC/MS) tuning and system performance, laboratory and field generated blank analysis results, surrogate recoveries, laboratory control/laboratory control duplicate samples (LCS/LCSD) recoveries and precision, matrix spike/matrix spike duplicate (MS/MSD) recovery and precision, field duplicate precision, initial calibrations, initial calibration verification (ICV) standard, continuing calibration verification (CCV) standards, qualitative identification, and the quantitation of positive results.

Issues are typically presented in two categories – deliverable issues and procedural issues. Deliverable issues are data issues that can easily be corrected and that may or may not impact the usability of the reported results. Procedural issues are issues that cannot be corrected and address method compliance issues; these issue may or may not impact the usability of the reported results. The data reviewer has included copies of relevant raw data, QC forms, and other documentation need to support any changes made to the data package in the Organic Data Support Documentation (Section 3) of this report.

Deliverable Review

1. In the electronic data deliverable and data package, the laboratory identified the MS and MSD as "MB-MW-02-20130410" and "MB-MW-02-20130410," respectively. According to the Chain-of-Custody (COC) Record, the laboratory should have identified the samples as "MB-MW-02-MS-20130410" and "MB-MW-02-MSD-20130410." Qualification of data was not warranted due to this issue.

2. In the semivolatile organic fraction, the laboratory did not provide the ICV standard summary forms or raw data for the ICV standards analyzed on Instrument 733, on 4/3/13 at 10:06 and 10:42; respectively. Upon Environmental Standards' request (see Project Correspondence [Section 5]), the laboratory provided the missing forms and raw data. Qualification due to this issue was not warranted.

Procedural Review

With regard to data usability, the principal areas of concern are field duplicate precision, MS/MSD recoveries, and reported positive results between the method detection limit (MDL) and reporting limit (RL). Based upon a rigorous review of the data package provided, the following organic data qualifiers are offered. The following data usability issues represent an interpretation of the QC results obtained for the project samples. Quite often, data qualifications address issues relating to sample matrix problems. Similarly, the data validation guidelines routinely specify areas of the data that require qualification, yet the methods used for analysis may not require corrective action by the laboratory. Accordingly, the following data usability issues should not be construed as an indication of laboratory performance.

Data Usability Review

- The analysis for 3,3′-dichlorobenzidine in sample MB-MW-02-20130410 should be considered unusable, and the "not-detected" results have been flagged "R" on the data tables. Very low recoveries (< 10%) were observed for 3,3′-dichlorobenzidine in the associated MS/MSD analyses.

- The DL for benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, and dibenz(a,h)anthracene in sample MB-MW-02-20130410 may be higher than reported, and the "not-detected" results have been flagged "UL" on the data tables. Low recoveries (< the lower laboratory acceptance limits) were observed for these compounds in the associated MS/MSD analyses.

- The DL for acenaphthene in sample MB-MW-04-20130410 may be higher than reported, and the "not-detected" result has been flagged "UJ" on the data tables. In addition, reported positive results for the acenaphthene in sample DUP-20130410 and for PCB-1242 in samples MB-MW-04-20130410 and DUP-20130410 should be considered estimated and have been flagged "J" on the data tables. Large discrepancies (the relative percent difference [RPD] was > 30% when both results were > 5× the RL) were observed between the results for these compounds in the field duplicate pair.

- All results reported at concentrations less than the sample-specific RL (adjusted for dilution factors and sample volume) and above the MDL should be between considered estimated and have been flagged "J" on the data tables.

Complete support documentation of this organic data QA review is presented in Section 3.

B. Conclusions

Based on this quality assurance review, the result for 3,3′-dichlorobenzidine in one sample was qualified as unusable due to very low MS/MSD recoveries. A portion of the data was qualified as estimated due to field duplicate precision, low matrix spike/matrix spike duplicate recoveries, and reported positive results between the MDL and RL. A result was qualified as unusable due to very low MS/MSD recoveries. In order to use any of the data, the data user should understand the qualifications and limitations as specified in this QA review. The Case Narrative and Project Chain-of-Custody Record is presented in Section 4. Project Correspondence is presented in Section 5.

Report prepared by,

Diana Chan
Quality Assurance Chemist

Report reviewed and approved by,

Stephen T. Zeiner, CEAC
Senior Technical Chemist/
Project Manager

Report reviewed and approved by,

Rock J. Vitale, CEAC
Technical Director of Chemistry/
Principal

ENVIRONMENTAL STANDARDS, INC.
1140 Valley Forge Road
P.O. Box 810
Valley Forge, PA 19482-0810

(610) 935-5577

Date: 6/5/13

SECTION 2

ANALYTICAL RESULTS

ORGANIC DATA QUALIFIERS

B	This result should be considered "not-detected" because it was detected in a laboratory and/or equipment blank at a similar level.
R	The data are unusable. (Note: The analyte may or may not be present.)
J	The associated value is an estimated quantity.
UJ	This analyte was analyzed for but was not detected. The associated reporting limit is an estimate and may be inaccurate or imprecise.
K	The analyte is present. The reported value may be biased high. The actual value is expected to be lower than reported.
L	The analyte is present. The reported values may be biased low. The actual value is expected to be higher than reported.
UL	The analyte was not detected, and the detection limit is probably higher than reported.

sys_sample_code	sample _date	analysis _date	chemical_name	result _value	detect _flag	lab_ qualifiers	method_ detection _limit	reporting_ detection _limit	quantitation _limit	result _unit	validator _qualifier
DUP-20130410	4/10/2013	4/23/2013	Aroclor-1260	0.0049	Y	J	0.0015	0.011	0.0014	ug/l	J
DUP-20130410	4/10/2013	4/23/2013	Aroclor-1254		N	U	0.0025	0.011	0.0023	ug/l	U
DUP-20130410	4/10/2013	4/23/2013	Aroclor-1268		N	U	0.0029	0.011	0.0027	ug/l	U
DUP-20130410	4/10/2013	4/23/2013	Aroclor-1221		N	U	0.0027	0.011	0.0025	ug/l	U
DUP-20130410	4/10/2013	4/23/2013	Aroclor-1232		N	U	0.0032	0.011	0.0029	ug/l	U
DUP-20130410	4/10/2013	4/23/2013	Aroclor-1248		N	U	0.0024	0.011	0.0023	ug/l	U
DUP-20130410	4/10/2013	4/23/2013	Aroclor-1016		N	U	0.0027	0.011	0.0025	ug/l	U
DUP-20130410	4/10/2013	4/23/2013	PCBs (total)	0.0479	Y		0.0032	0.011	0.0029	ug/l	
DUP-20130410	4/10/2013	4/23/2013	Aroclor-1262		N	U	0.0022	0.011	0.0021	ug/l	U
DUP-20130410	4/10/2013	4/23/2013	Aroclor-1242	0.043	Y		0.0020	0.011	0.0019	ug/l	J
DUP-20130410	4/10/2013	4/17/2013	4-Nitroaniline		N	U	1.8	51	1.7	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	4-Nitrophenol		N	U	6.6	51	6.5	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Benzaldehyde		N	U	1.5	10	1.5	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	4-Bromophenyl-phenyl ether		N	U	0.65	10	0.64	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Caprolactam		N	U	12	51	12	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	2,4-Dimethylphenol		N	U	0.87	10	0.85	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	4-Chloroaniline		N	U	0.90	10	0.89	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	2,2'-oxybis(1-Chloropropane)		N	U	0.20	2.0	0.20	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Phenol		N	U	0.59	2.0	0.58	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	bis(2-Chloroethyl) ether		N	U	0.26	2.0	0.25	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	bis(2-Chloroethoxy)methane		N	U	0.59	10	0.58	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	bis(2-Ethylhexyl)phthalate		N	U	13	20	13	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Di-n-octylphthalate		N	U	2.1	10	2.1	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Hexachlorobenzene		N	U	0.19	2.0	0.18	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Anthracene	0.40	Y	J	0.16	2.0	0.15	ug/l	J
DUP-20130410	4/10/2013	4/17/2013	2,4-Dichlorophenol		N	U	0.34	2.0	0.33	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	2,4-Dinitrotoluene		N	U	0.55	10	0.54	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Pyrene		N	U	0.16	2.0	0.16	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Dimethyl phthalate		N	U	0.78	10	0.77	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Dibenzofuran		N	U	0.63	10	0.62	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Atrazine		N	U	0.91	10	0.89	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Benzo(g,h,i)perylene		N	U	0.15	2.0	0.15	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Indeno(1,2,3-cd)pyrene		N	U	0.20	2.0	0.20	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Benzo(b)fluoranthene		N	U	0.16	2.0	0.16	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Fluoranthene		N	U	0.17	2.0	0.16	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Benzo(k)fluoranthene		N	U	0.56	2.0	0.55	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Acenaphthylene		N	U	0.16	2.0	0.15	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Chrysene		N	U	0.14	2.0	0.14	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Benzo(a)pyrene		N	U	0.14	2.0	0.13	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	2,4-Dinitrophenol		N	U	6.3	51	6.1	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	4,6-Dinitro-2-methylphenol		N	U	2.2	51	2.2	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Dibenz(a,h)anthracene		N	U	0.16	2.0	0.16	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Benzo(a)anthracene		N	U	0.15	2.0	0.15	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	4-Chloro-3-methylphenol		N	U	0.77	10	0.75	ug/l	U

sys_sample_code	sample _date	analysis _date	chemical_name	result _value	detect _flag	lab_ qualifiers	method_ detection _limit	reporting_ detection _limit	quantitation _limit	result _unit	validator _qualifier
DUP-20130410	4/10/2013	4/17/2013	2,6-Dinitrotoluene		N	U	0.81	10	0.80	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	N-Nitroso-di-n-propylamine		N	U	0.31	2.0	0.31	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	3&4-Methylphenol		N	U	0.92	10	0.90	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Hexachloroethane		N	U	0.64	10	0.63	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	4-Chlorophenyl-phenyl ether		N	U	0.51	10	0.50	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Hexachlorocyclopentadiene		N	U	0.53	10	0.52	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Isophorone		N	U	0.66	10	0.64	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Acenaphthene	2.8	Y		0.15	2.0	0.14	ug/l	J
DUP-20130410	4/10/2013	4/17/2013	Diethylphthalate		N	U	1.5	10	1.5	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Di-n-butyl phthalate		N	U	1.3	10	1.2	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Phenanthrene		N	U	0.44	2.0	0.43	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Butylbenzylphthalate		N	U	1.5	10	1.4	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	N-Nitrosodiphenylamine		N	U	0.87	10	0.85	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Fluorene	1.3	Y	J	0.22	2.0	0.22	ug/l	J
DUP-20130410	4/10/2013	4/17/2013	Carbazole		N	U	0.16	2.0	0.16	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Hexachlorobutadiene		N	U	0.17	2.0	0.17	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Pentachlorophenol		N	U	0.68	10	0.66	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	2,4,6-Trichlorophenol		N	U	1.8	10	1.7	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	2-Nitroaniline		N	U	3.6	51	3.5	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	2-Nitrophenol		N	U	1.7	10	1.7	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Naphthalene		N	U	0.14	2.0	0.14	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	2-Methylnaphthalene		N	U	0.12	2.0	0.12	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	2-Chloronaphthalene		N	U	0.15	2.0	0.15	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	3,3'-Dichlorobenzidine		N	U	1.1	10	1.1	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Biphenyl		N	U	0.42	10	0.42	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	2-Methylphenol		N	U	0.88	10	0.86	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	2-Chlorophenol		N	U	1.7	10	1.7	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	2,4,5-Trichlorophenol		N	U	1.6	10	1.5	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Acetophenone		N	U	0.82	10	0.80	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	Nitrobenzene		N	U	0.86	20	0.84	ug/l	U
DUP-20130410	4/10/2013	4/17/2013	3-Nitroaniline		N	U	3.3	51	3.2	ug/l	U
MB-FB-20130410	4/10/2013	4/23/2013	Aroclor-1260		N	U	0.0014	0.010	0.0014	ug/l	U
MB-FB-20130410	4/10/2013	4/23/2013	Aroclor-1254		N	U	0.0023	0.010	0.0023	ug/l	U
MB-FB-20130410	4/10/2013	4/23/2013	Aroclor-1268		N	U	0.0027	0.010	0.0027	ug/l	U
MB-FB-20130410	4/10/2013	4/23/2013	Aroclor-1221		N	U	0.0025	0.010	0.0025	ug/l	U
MB-FB-20130410	4/10/2013	4/23/2013	Aroclor-1232		N	U	0.0030	0.010	0.0029	ug/l	U
MB-FB-20130410	4/10/2013	4/23/2013	Aroclor-1248		N	U	0.0023	0.010	0.0023	ug/l	U
MB-FB-20130410	4/10/2013	4/23/2013	Aroclor-1016		N	U	0.0025	0.010	0.0025	ug/l	U
MB-FB-20130410	4/10/2013	4/23/2013	PCBs (total)		N	U	0.0030	0.010	0.0029	ug/l	U
MB-FB-20130410	4/10/2013	4/23/2013	Aroclor-1262		N	U	0.0021	0.010	0.0021	ug/l	U
MB-FB-20130410	4/10/2013	4/23/2013	Aroclor-1242		N	U	0.0019	0.010	0.0019	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	4-Nitroaniline		N	U	2.0	57	1.7	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	4-Nitrophenol		N	U	7.4	57	6.5	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Benzaldehyde		N	U	1.7	11	1.5	ug/l	U

sys_sample_code	sample _date	analysis _date	chemical_name	result _value	detect _flag	lab_ qualifiers	method_ detection _limit	reporting_ detection _limit	quantitation _limit	result _unit	validator _qualifier
MB-FB-20130410	4/10/2013	4/17/2013	4-Bromophenyl-phenyl ether		N	U	0.73	11	0.64	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Caprolactam		N	U	14	57	12	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	2,4-Dimethylphenol		N	U	0.98	11	0.85	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	4-Chloroaniline		N	U	1.0	11	0.89	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	2,2'-oxybis(1-Chloropropane)		N	U	0.23	2.3	0.20	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Phenol		N	U	0.67	2.3	0.58	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	bis(2-Chloroethyl) ether		N	U	0.29	2.3	0.25	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	bis(2-Chloroethoxy)methane		N	U	0.67	11	0.58	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	bis(2-Ethylhexyl)phthalate		N	U	14	23	13	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Di-n-octylphthalate		N	U	2.4	11	2.1	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Hexachlorobenzene		N	U	0.21	2.3	0.18	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Anthracene		N	U	0.18	2.3	0.15	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	2,4-Dichlorophenol		N	U	0.38	2.3	0.33	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	2,4-Dinitrotoluene		N	U	0.62	11	0.54	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Pyrene		N	U	0.18	2.3	0.16	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Dimethyl phthalate		N	U	0.88	11	0.77	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Dibenzofuran		N	U	0.71	11	0.62	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Atrazine		N	U	1.0	11	0.89	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Benzo(g,h,i)perylene		N	U	0.17	2.3	0.15	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Indeno(1,2,3-cd)pyrene		N	U	0.23	2.3	0.20	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Benzo(b)fluoranthene		N	U	0.18	2.3	0.16	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Fluoranthene		N	U	0.19	2.3	0.16	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Benzo(k)fluoranthene		N	U	0.63	2.3	0.55	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Acenaphthylene		N	U	0.17	2.3	0.15	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Chrysene		N	U	0.16	2.3	0.14	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Benzo(a)pyrene		N	U	0.15	2.3	0.13	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	2,4-Dinitrophenol		N	U	7.0	57	6.1	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	4,6-Dinitro-2-methylphenol		N	U	2.5	57	2.2	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Dibenz(a,h)anthracene		N	U	0.18	2.3	0.16	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Benzo(a)anthracene		N	U	0.17	2.3	0.15	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	4-Chloro-3-methylphenol		N	U	0.87	11	0.75	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	2,6-Dinitrotoluene		N	U	0.92	11	0.80	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	N-Nitroso-di-n-propylamine		N	U	0.35	2.3	0.31	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	3&4-Methylphenol		N	U	1.0	11	0.90	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Hexachloroethane		N	U	0.72	11	0.63	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	4-Chlorophenyl-phenyl ether		N	U	0.58	11	0.50	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Hexachlorocyclopentadiene		N	U	0.60	11	0.52	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Isophorone		N	U	0.74	11	0.64	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Acenaphthene		N	U	0.17	2.3	0.14	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Diethylphthalate		N	U	1.7	11	1.5	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Di-n-butyl phthalate		N	U	1.4	11	1.2	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Phenanthrene		N	U	0.49	2.3	0.43	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Butylbenzylphthalate		N	U	1.6	11	1.4	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	N-Nitrosodiphenylamine		N	U	0.98	11	0.85	ug/l	U

sys_sample_code	sample _date	analysis _date	chemical_name	result _value	detect _flag	lab_ qualifiers	method_ detection _limit	reporting_ detection _limit	quantitation _limit	result _unit	validator _qualifier
MB-FB-20130410	4/10/2013	4/17/2013	Fluorene		N	U	0.25	2.3	0.22	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Carbazole		N	U	0.18	2.3	0.16	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Hexachlorobutadiene		N	U	0.19	2.3	0.17	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Pentachlorophenol		N	U	0.76	11	0.66	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	2,4,6-Trichlorophenol		N	U	2.0	11	1.7	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	2-Nitroaniline		N	U	4.0	57	3.5	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	2-Nitrophenol		N	U	2.0	11	1.7	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Naphthalene		N	U	0.16	2.3	0.14	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	2-Methylnaphthalene		N	U	0.14	2.3	0.12	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	2-Chloronaphthalene		N	U	0.17	2.3	0.15	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	3,3'-Dichlorobenzidine		N	U	1.3	11	1.1	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Biphenyl		N	U	0.48	11	0.42	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	2-Methylphenol		N	U	0.99	11	0.86	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	2-Chlorophenol		N	U	1.9	11	1.7	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	2,4,5-Trichlorophenol		N	U	1.8	11	1.5	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Acetophenone		N	U	0.92	11	0.80	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	Nitrobenzene		N	U	0.97	23	0.84	ug/l	U
MB-FB-20130410	4/10/2013	4/17/2013	3-Nitroaniline		N	U	3.7	57	3.2	ug/l	U
MB-FB-20130411	4/11/2013	4/23/2013	Aroclor-1260		N	U	0.0015	0.011	0.0014	ug/l	U
MB-FB-20130411	4/11/2013	4/23/2013	Aroclor-1254		N	U	0.0025	0.011	0.0023	ug/l	U
MB-FB-20130411	4/11/2013	4/23/2013	Aroclor-1268		N	U	0.0030	0.011	0.0027	ug/l	U
MB-FB-20130411	4/11/2013	4/23/2013	Aroclor-1221		N	U	0.0027	0.011	0.0025	ug/l	U
MB-FB-20130411	4/11/2013	4/23/2013	Aroclor-1232		N	U	0.0032	0.011	0.0029	ug/l	U
MB-FB-20130411	4/11/2013	4/23/2013	Aroclor-1248		N	U	0.0025	0.011	0.0023	ug/l	U
MB-FB-20130411	4/11/2013	4/23/2013	Aroclor-1016		N	U	0.0027	0.011	0.0025	ug/l	U
MB-FB-20130411	4/11/2013	4/23/2013	PCBs (total)		N	U	0.0032	0.011	0.0029	ug/l	U
MB-FB-20130411	4/11/2013	4/23/2013	Aroclor-1262		N	U	0.0022	0.011	0.0021	ug/l	U
MB-FB-20130411	4/11/2013	4/23/2013	Aroclor-1242		N	U	0.0020	0.011	0.0019	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	4-Nitroaniline		N	U	1.8	52	1.7	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	4-Nitrophenol		N	U	6.7	52	6.5	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Benzaldehyde		N	U	1.6	10	1.5	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	4-Bromophenyl-phenyl ether		N	U	0.66	10	0.64	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Caprolactam		N	U	12	52	12	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	2,4-Dimethylphenol		N	U	0.89	10	0.85	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	4-Chloroaniline		N	U	0.92	10	0.89	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	2,2'-oxybis(1-Chloropropane)		N	U	0.21	2.1	0.20	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Phenol		N	U	0.61	2.1	0.58	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	bis(2-Chloroethyl) ether		N	U	0.26	2.1	0.25	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	bis(2-Chloroethoxy)methane		N	U	0.61	10	0.58	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	bis(2-Ethylhexyl)phthalate		N	U	13	21	13	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Di-n-octylphthalate		N	U	2.2	10	2.1	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Hexachlorobenzene		N	U	0.19	2.1	0.18	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Anthracene		N	U	0.16	2.1	0.15	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	2,4-Dichlorophenol		N	U	0.35	2.1	0.33	ug/l	U

sys_sample_code	sample _date	analysis _date	chemical_name	result _value	detect _flag	lab_ qualifiers	method_ detection _limit	reporting_ detection _limit	quantitation _limit	result _unit	validator _qualifier
MB-FB-20130411	4/11/2013	4/17/2013	2,4-Dinitrotoluene		N	U	0.56	10	0.54	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Pyrene		N	U	0.16	2.1	0.16	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Dimethyl phthalate		N	U	0.80	10	0.77	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Dibenzofuran		N	U	0.64	10	0.62	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Atrazine		N	U	0.93	10	0.89	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Benzo(g,h,i)perylene		N	U	0.16	2.1	0.15	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Indeno(1,2,3-cd)pyrene		N	U	0.21	2.1	0.20	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Benzo(b)fluoranthene		N	U	0.16	2.1	0.16	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Fluoranthene		N	U	0.17	2.1	0.16	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Benzo(k)fluoranthene		N	U	0.57	2.1	0.55	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Acenaphthylene		N	U	0.16	2.1	0.15	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Chrysene		N	U	0.15	2.1	0.14	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Benzo(a)pyrene		N	U	0.14	2.1	0.13	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	2,4-Dinitrophenol		N	U	6.4	52	6.1	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	4,6-Dinitro-2-methylphenol		N	U	2.3	52	2.2	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Dibenz(a,h)anthracene		N	U	0.16	2.1	0.16	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Benzo(a)anthracene		N	U	0.15	2.1	0.15	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	4-Chloro-3-methylphenol		N	U	0.79	10	0.75	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	2,6-Dinitrotoluene		N	U	0.83	10	0.80	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	N-Nitroso-di-n-propylamine		N	U	0.32	2.1	0.31	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	3&4-Methylphenol		N	U	0.94	10	0.90	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Hexachloroethane		N	U	0.65	10	0.63	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	4-Chlorophenyl-phenyl ether		N	U	0.52	10	0.50	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Hexachlorocyclopentadiene		N	U	0.54	10	0.52	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Isophorone		N	U	0.67	10	0.64	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Acenaphthene		N	U	0.15	2.1	0.14	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Diethylphthalate		N	U	1.5	10	1.5	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Di-n-butyl phthalate		N	U	1.3	10	1.2	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Phenanthrene		N	U	0.44	2.1	0.43	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Butylbenzylphthalate		N	U	1.5	10	1.4	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	N-Nitrosodiphenylamine		N	U	0.89	10	0.85	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Fluorene		N	U	0.23	2.1	0.22	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Carbazole		N	U	0.16	2.1	0.16	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Hexachlorobutadiene		N	U	0.17	2.1	0.17	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Pentachlorophenol		N	U	0.69	10	0.66	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	2,4,6-Trichlorophenol		N	U	1.8	10	1.7	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	2-Nitroaniline		N	U	3.7	52	3.5	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	2-Nitrophenol		N	U	1.8	10	1.7	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Naphthalene		N	U	0.15	2.1	0.14	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	2-Methylnaphthalene		N	U	0.13	2.1	0.12	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	2-Chloronaphthalene		N	U	0.16	2.1	0.15	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	3,3'-Dichlorobenzidine		N	U	1.2	10	1.1	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Biphenyl		N	U	0.43	10	0.42	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	2-Methylphenol		N	U	0.90	10	0.86	ug/l	U

sys_sample_code	sample _date	analysis _date	chemical_name	result _value	detect _flag	lab_ qualifiers	method_ detection _limit	reporting_ detection _limit	quantitation _limit	result _unit	validator _qualifier
MB-FB-20130411	4/11/2013	4/17/2013	2-Chlorophenol		N	U	1.7	10	1.7	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	2,4,5-Trichlorophenol		N	U	1.6	10	1.5	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Acetophenone		N	U	0.83	10	0.80	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	Nitrobenzene		N	U	0.88	21	0.84	ug/l	U
MB-FB-20130411	4/11/2013	4/17/2013	3-Nitroaniline		N	U	3.3	52	3.2	ug/l	U
MB-MW-01-20130410	4/10/2013	4/23/2013	Aroclor-1260		N	U	0.0014	0.010	0.0014	ug/l	U
MB-MW-01-20130410	4/10/2013	4/23/2013	Aroclor-1254		N	U	0.0024	0.010	0.0023	ug/l	U
MB-MW-01-20130410	4/10/2013	4/23/2013	Aroclor-1268		N	U	0.0028	0.010	0.0027	ug/l	U
MB-MW-01-20130410	4/10/2013	4/23/2013	Aroclor-1221		N	U	0.0026	0.010	0.0025	ug/l	U
MB-MW-01-20130410	4/10/2013	4/23/2013	Aroclor-1232		N	U	0.0031	0.010	0.0029	ug/l	U
MB-MW-01-20130410	4/10/2013	4/23/2013	Aroclor-1248		N	U	0.0024	0.010	0.0023	ug/l	U
MB-MW-01-20130410	4/10/2013	4/23/2013	Aroclor-1016		N	U	0.0026	0.010	0.0025	ug/l	U
MB-MW-01-20130410	4/10/2013	4/23/2013	PCBs (total)		N	U	0.0031	0.010	0.0029	ug/l	U
MB-MW-01-20130410	4/10/2013	4/23/2013	Aroclor-1262		N	U	0.0021	0.010	0.0021	ug/l	U
MB-MW-01-20130410	4/10/2013	4/23/2013	Aroclor-1242		N	U	0.0019	0.010	0.0019	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	4-Nitroaniline		N	U	1.8	51	1.7	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	4-Nitrophenol		N	U	6.6	51	6.5	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Benzaldehyde	7.8	Y	J	1.5	10	1.5	ug/l	J
MB-MW-01-20130410	4/10/2013	4/17/2013	4-Bromophenyl-phenyl ether		N	U	0.65	10	0.64	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Caprolactam		N	U	12	51	12	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	2,4-Dimethylphenol		N	U	0.87	10	0.85	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	4-Chloroaniline		N	U	0.90	10	0.89	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	2,2'-oxybis(1-Chloropropane)		N	U	0.20	2.0	0.20	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Phenol		N	U	0.59	2.0	0.58	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	bis(2-Chloroethyl) ether		N	U	0.26	2.0	0.25	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	bis(2-Chloroethoxy)methane		N	U	0.59	10	0.58	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	bis(2-Ethylhexyl)phthalate		N	U	13	20	13	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Di-n-octylphthalate		N	U	2.1	10	2.1	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Hexachlorobenzene		N	U	0.19	2.0	0.18	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Anthracene	0.22	Y	J	0.16	2.0	0.15	ug/l	J
MB-MW-01-20130410	4/10/2013	4/17/2013	2,4-Dichlorophenol		N	U	0.34	2.0	0.33	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	2,4-Dinitrotoluene		N	U	0.55	10	0.54	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Pyrene		N	U	0.16	2.0	0.16	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Dimethyl phthalate		N	U	0.78	10	0.77	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Dibenzofuran		N	U	0.63	10	0.62	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Atrazine		N	U	0.91	10	0.89	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Benzo(g,h,i)perylene		N	U	0.15	2.0	0.15	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Indeno(1,2,3-cd)pyrene		N	U	0.20	2.0	0.20	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Benzo(b)fluoranthene		N	U	0.16	2.0	0.16	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Fluoranthene		N	U	0.17	2.0	0.16	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Benzo(k)fluoranthene		N	U	0.56	2.0	0.55	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Acenaphthylene		N	U	0.16	2.0	0.15	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Chrysene		N	U	0.14	2.0	0.14	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Benzo(a)pyrene		N	U	0.14	2.0	0.13	ug/l	U

sys_sample_code	sample _date	analysis _date	chemical_name	result _value	detect _flag	lab_ qualifiers	method_ detection _limit	reporting_ detection _limit	quantitation _limit	result _unit	validator _qualifier
MB-MW-01-20130410	4/10/2013	4/17/2013	2,4-Dinitrophenol		N	U	6.3	51	6.1	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	4,6-Dinitro-2-methylphenol		N	U	2.2	51	2.2	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Dibenz(a,h)anthracene		N	U	0.16	2.0	0.16	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Benzo(a)anthracene		N	U	0.15	2.0	0.15	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	4-Chloro-3-methylphenol		N	U	0.77	10	0.75	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	2,6-Dinitrotoluene		N	U	0.81	10	0.80	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	N-Nitroso-di-n-propylamine		N	U	0.31	2.0	0.31	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	3&4-Methylphenol		N	U	0.92	10	0.90	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Hexachloroethane		N	U	0.64	10	0.63	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	4-Chlorophenyl-phenyl ether		N	U	0.51	10	0.50	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Hexachlorocyclopentadiene		N	U	0.53	10	0.52	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Isophorone		N	U	0.66	10	0.64	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Acenaphthene	2.2	Y		0.15	2.0	0.14	ug/l	
MB-MW-01-20130410	4/10/2013	4/17/2013	Diethylphthalate		N	U	1.5	10	1.5	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Di-n-butyl phthalate		N	U	1.3	10	1.2	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Phenanthrene	0.54	Y	J	0.44	2.0	0.43	ug/l	J
MB-MW-01-20130410	4/10/2013	4/17/2013	Butylbenzylphthalate		N	U	1.5	10	1.4	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	N-Nitrosodiphenylamine		N	U	0.87	10	0.85	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Fluorene	0.72	Y	J	0.22	2.0	0.22	ug/l	J
MB-MW-01-20130410	4/10/2013	4/17/2013	Carbazole		N	U	0.16	2.0	0.16	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Hexachlorobutadiene		N	U	0.17	2.0	0.17	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Pentachlorophenol		N	U	0.68	10	0.66	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	2,4,6-Trichlorophenol		N	U	1.8	10	1.7	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	2-Nitroaniline		N	U	3.6	51	3.5	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	2-Nitrophenol		N	U	1.7	10	1.7	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Naphthalene	71	Y		0.14	2.0	0.14	ug/l	
MB-MW-01-20130410	4/10/2013	4/17/2013	2-Methylnaphthalene	0.42	Y	J	0.12	2.0	0.12	ug/l	J
MB-MW-01-20130410	4/10/2013	4/17/2013	2-Chloronaphthalene		N	U	0.15	2.0	0.15	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	3,3'-Dichlorobenzidine		N	U	1.1	10	1.1	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Biphenyl		N	U	0.42	10	0.42	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	2-Methylphenol		N	U	0.88	10	0.86	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	2-Chlorophenol		N	U	1.7	10	1.7	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	2,4,5-Trichlorophenol		N	U	1.6	10	1.5	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Acetophenone		N	U	0.82	10	0.80	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	Nitrobenzene		N	U	0.86	20	0.84	ug/l	U
MB-MW-01-20130410	4/10/2013	4/17/2013	3-Nitroaniline		N	U	3.3	51	3.2	ug/l	U
MB-MW-02-20130410	4/10/2013	4/24/2013	Aroclor-1260		N	U	0.0014	0.010	0.0014	ug/l	U
MB-MW-02-20130410	4/10/2013	4/24/2013	Aroclor-1254		N	U	0.0023	0.010	0.0023	ug/l	U
MB-MW-02-20130410	4/10/2013	4/24/2013	Aroclor-1268		N	U	0.0027	0.010	0.0027	ug/l	U
MB-MW-02-20130410	4/10/2013	4/24/2013	Aroclor-1221		N	U	0.0025	0.010	0.0025	ug/l	U
MB-MW-02-20130410	4/10/2013	4/24/2013	Aroclor-1232		N	U	0.0030	0.010	0.0029	ug/l	U
MB-MW-02-20130410	4/10/2013	4/24/2013	Aroclor-1248		N	U	0.0023	0.010	0.0023	ug/l	U
MB-MW-02-20130410	4/10/2013	4/24/2013	Aroclor-1016		N	U	0.0025	0.010	0.0025	ug/l	U
MB-MW-02-20130410	4/10/2013	4/24/2013	PCBs (total)		N	U	0.0030	0.010	0.0029	ug/l	U

sys_sample_code	sample _date	analysis _date	chemical_name	result _value	detect _flag	lab_ qualifiers	method_ detection _limit	reporting_ detection _limit	quantitation _limit	result _unit	validator _qualifier
MB-MW-02-20130410	4/10/2013	4/24/2013	Aroclor-1262		N	U	0.0021	0.010	0.0021	ug/l	U
MB-MW-02-20130410	4/10/2013	4/24/2013	Aroclor-1242		N	U	0.0019	0.010	0.0019	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	4-Nitroaniline		N	U	1.8	52	1.7	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	4-Nitrophenol		N	U	6.7	52	6.5	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Benzaldehyde		N	U	1.6	10	1.5	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	4-Bromophenyl-phenyl ether		N	U	0.66	10	0.64	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Caprolactam		N	U	12	52	12	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	2,4-Dimethylphenol	65	Y		0.89	10	0.85	ug/l	
MB-MW-02-20130410	4/10/2013	4/17/2013	4-Chloroaniline		N	U	0.92	10	0.89	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	2,2'-oxybis(1-Chloropropane)		N	U	0.21	2.1	0.20	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Phenol		N	U	0.61	2.1	0.58	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	bis(2-Chloroethyl) ether		N	U	0.26	2.1	0.25	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	bis(2-Chloroethoxy)methane		N	U	0.61	10	0.58	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	bis(2-Ethylhexyl)phthalate		N	U	13	21	13	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Di-n-octylphthalate		N	U	2.2	10	2.1	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Hexachlorobenzene		N	U	0.19	2.1	0.18	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Anthracene	0.37	Y	J	0.16	2.1	0.15	ug/l	J
MB-MW-02-20130410	4/10/2013	4/17/2013	2,4-Dichlorophenol		N	U	0.35	2.1	0.33	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	2,4-Dinitrotoluene		N	U	0.56	10	0.54	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Pyrene		N	U	0.16	2.1	0.16	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Dimethyl phthalate		N	U	0.80	10	0.77	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Dibenzofuran		N	U	0.64	10	0.62	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Atrazine		N	U	0.93	10	0.89	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Benzo(g,h,i)perylene		N	U	0.16	2.1	0.15	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Indeno(1,2,3-cd)pyrene		N	U	0.21	2.1	0.20	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Benzo(b)fluoranthene		N	U	0.16	2.1	0.16	ug/l	UL
MB-MW-02-20130410	4/10/2013	4/17/2013	Fluoranthene		N	U	0.17	2.1	0.16	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Benzo(k)fluoranthene		N	U	0.57	2.1	0.55	ug/l	UL
MB-MW-02-20130410	4/10/2013	4/17/2013	Acenaphthylene		N	U	0.16	2.1	0.15	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Chrysene		N	U	0.15	2.1	0.14	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Benzo(a)pyrene		N	U	0.14	2.1	0.13	ug/l	UL
MB-MW-02-20130410	4/10/2013	4/17/2013	2,4-Dinitrophenol		N	U	6.4	52	6.1	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	4,6-Dinitro-2-methylphenol		N	U	2.3	52	2.2	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Dibenz(a,h)anthracene		N	U	0.16	2.1	0.16	ug/l	UL
MB-MW-02-20130410	4/10/2013	4/17/2013	Benzo(a)anthracene		N	U	0.15	2.1	0.15	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	4-Chloro-3-methylphenol		N	U	0.79	10	0.75	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	2,6-Dinitrotoluene		N	U	0.83	10	0.80	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	N-Nitroso-di-n-propylamine		N	U	0.32	2.1	0.31	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	3&4-Methylphenol		N	U	0.94	10	0.90	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Hexachloroethane		N	U	0.65	10	0.63	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	4-Chlorophenyl-phenyl ether		N	U	0.52	10	0.50	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Hexachlorocyclopentadiene		N	U	0.54	10	0.52	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Isophorone	2.2	Y	J	0.67	10	0.64	ug/l	J
MB-MW-02-20130410	4/10/2013	4/17/2013	Acenaphthene		N	U	0.15	2.1	0.14	ug/l	U

sys_sample_code	sample _date	analysis _date	chemical_name	result _value	detect _flag	lab_ qualifiers	method_ detection _limit	reporting_ detection _limit	quantitation _limit	result _unit	validator _qualifier
MB-MW-02-20130410	4/10/2013	4/17/2013	Diethylphthalate		N	U	1.5	10	1.5	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Di-n-butyl phthalate		N	U	1.3	10	1.2	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Phenanthrene		N	U	0.44	2.1	0.43	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Butylbenzylphthalate		N	U	1.5	10	1.4	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	N-Nitrosodiphenylamine		N	U	0.89	10	0.85	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Fluorene		N	U	0.23	2.1	0.22	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Carbazole		N	U	0.16	2.1	0.16	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Hexachlorobutadiene		N	U	0.17	2.1	0.17	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Pentachlorophenol		N	U	0.69	10	0.66	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	2,4,6-Trichlorophenol		N	U	1.8	10	1.7	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	2-Nitroaniline		N	U	3.7	52	3.5	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	2-Nitrophenol		N	U	1.8	10	1.7	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Naphthalene		N	U	0.15	2.1	0.14	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	2-Methylnaphthalene		N	U	0.13	2.1	0.12	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	2-Chloronaphthalene		N	U	0.16	2.1	0.15	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	3,3'-Dichlorobenzidine		N	U	1.2	10	1.1	ug/l	R
MB-MW-02-20130410	4/10/2013	4/17/2013	Biphenyl		N	U	0.43	10	0.42	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	2-Methylphenol		N	U	0.90	10	0.86	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	2-Chlorophenol		N	U	1.7	10	1.7	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	2,4,5-Trichlorophenol		N	U	1.6	10	1.5	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Acetophenone		N	U	0.83	10	0.80	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	Nitrobenzene		N	U	0.88	21	0.84	ug/l	U
MB-MW-02-20130410	4/10/2013	4/17/2013	3-Nitroaniline		N	U	3.3	52	3.2	ug/l	U
MB-MW-03-20130410	4/10/2013	4/24/2013	Aroclor-1260		N	U	0.0015	0.011	0.0014	ug/l	U
MB-MW-03-20130410	4/10/2013	4/24/2013	Aroclor-1254		N	U	0.0026	0.011	0.0023	ug/l	U
MB-MW-03-20130410	4/10/2013	4/24/2013	Aroclor-1268	0.033	Y		0.0031	0.011	0.0027	ug/l	
MB-MW-03-20130410	4/10/2013	4/24/2013	Aroclor-1221		N	U	0.0028	0.011	0.0025	ug/l	U
MB-MW-03-20130410	4/10/2013	4/24/2013	Aroclor-1232		N	U	0.0033	0.011	0.0029	ug/l	U
MB-MW-03-20130410	4/10/2013	4/24/2013	Aroclor-1248		N	U	0.0026	0.011	0.0023	ug/l	U
MB-MW-03-20130410	4/10/2013	4/24/2013	Aroclor-1016		N	U	0.0028	0.011	0.0025	ug/l	U
MB-MW-03-20130410	4/10/2013	4/24/2013	PCBs (total)	0.033	Y		0.0033	0.011	0.0029	ug/l	
MB-MW-03-20130410	4/10/2013	4/24/2013	Aroclor-1262		N	U	0.0023	0.011	0.0021	ug/l	U
MB-MW-03-20130410	4/10/2013	4/24/2013	Aroclor-1242		N	U	0.0021	0.011	0.0019	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	4-Nitroaniline		N	U	1.9	56	1.7	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	4-Nitrophenol		N	U	7.2	56	6.5	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Benzaldehyde	8.6	Y	J	1.7	11	1.5	ug/l	J
MB-MW-03-20130410	4/10/2013	4/17/2013	4-Bromophenyl-phenyl ether		N	U	0.71	11	0.64	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Caprolactam		N	U	13	56	12	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	2,4-Dimethylphenol	1.3	Y	J	0.95	11	0.85	ug/l	J
MB-MW-03-20130410	4/10/2013	4/17/2013	4-Chloroaniline		N	U	0.98	11	0.89	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	2,2'-oxybis(1-Chloropropane)		N	U	0.22	2.2	0.20	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Phenol		N	U	0.65	2.2	0.58	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	bis(2-Chloroethyl) ether		N	U	0.28	2.2	0.25	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	bis(2-Chloroethoxy)methane		N	U	0.65	11	0.58	ug/l	U

sys_sample_code	sample _date	analysis _date	chemical_name	result _value	detect _flag	lab_ qualifiers	method_ detection _limit	reporting_ detection _limit	quantitation _limit	result _unit	validator _qualifier
MB-MW-03-20130410	4/10/2013	4/17/2013	bis(2-Ethylhexyl)phthalate		N	U	14	22	13	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Di-n-octylphthalate		N	U	2.3	11	2.1	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Hexachlorobenzene		N	U	0.20	2.2	0.18	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Anthracene		N	U	0.17	2.2	0.15	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	2,4-Dichlorophenol		N	U	0.37	2.2	0.33	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	2,4-Dinitrotoluene		N	U	0.60	11	0.54	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Pyrene		N	U	0.17	2.2	0.16	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Dimethyl phthalate		N	U	0.85	11	0.77	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Dibenzofuran		N	U	0.69	11	0.62	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Atrazine		N	U	0.99	11	0.89	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Benzo(g,h,i)perylene		N	U	0.17	2.2	0.15	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Indeno(1,2,3-cd)pyrene		N	U	0.22	2.2	0.20	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Benzo(b)fluoranthene		N	U	0.17	2.2	0.16	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Fluoranthene		N	U	0.18	2.2	0.16	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Benzo(k)fluoranthene		N	U	0.61	2.2	0.55	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Acenaphthylene		N	U	0.17	2.2	0.15	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Chrysene		N	U	0.16	2.2	0.14	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Benzo(a)pyrene		N	U	0.15	2.2	0.13	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	2,4-Dinitrophenol		N	U	6.8	56	6.1	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	4,6-Dinitro-2-methylphenol		N	U	2.4	56	2.2	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Dibenz(a,h)anthracene		N	U	0.17	2.2	0.16	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Benzo(a)anthracene		N	U	0.16	2.2	0.15	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	4-Chloro-3-methylphenol		N	U	0.84	11	0.75	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	2,6-Dinitrotoluene		N	U	0.89	11	0.80	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	N-Nitroso-di-n-propylamine		N	U	0.34	2.2	0.31	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	3&4-Methylphenol	3.9	Y	J	1.0	11	0.90	ug/l	J
MB-MW-03-20130410	4/10/2013	4/17/2013	Hexachloroethane		N	U	0.70	11	0.63	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	4-Chlorophenyl-phenyl ether		N	U	0.56	11	0.50	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Hexachlorocyclopentadiene		N	U	0.58	11	0.52	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Isophorone		N	U	0.72	11	0.64	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Acenaphthene		N	U	0.16	2.2	0.14	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Diethylphthalate		N	U	1.6	11	1.5	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Di-n-butyl phthalate		N	U	1.4	11	1.2	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Phenanthrene		N	U	0.47	2.2	0.43	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Butylbenzylphthalate		N	U	1.6	11	1.4	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	N-Nitrosodiphenylamine		N	U	0.95	11	0.85	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Fluorene		N	U	0.24	2.2	0.22	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Carbazole		N	U	0.18	2.2	0.16	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Hexachlorobutadiene		N	U	0.18	2.2	0.17	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Pentachlorophenol		N	U	0.74	11	0.66	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	2,4,6-Trichlorophenol		N	U	1.9	11	1.7	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	2-Nitroaniline		N	U	3.9	56	3.5	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	2-Nitrophenol		N	U	1.9	11	1.7	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Naphthalene		N	U	0.16	2.2	0.14	ug/l	U

sys_sample_code	sample _date	analysis _date	chemical_name	result _value	detect _flag	lab_ qualifiers	method_ detection _limit	reporting_ detection _limit	quantitation _limit	result _unit	validator _qualifier
MB-MW-03-20130410	4/10/2013	4/17/2013	2-Methylnaphthalene		N	U	0.14	2.2	0.12	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	2-Chloronaphthalene		N	U	0.17	2.2	0.15	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	3,3'-Dichlorobenzidine		N	U	1.2	11	1.1	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Biphenyl		N	U	0.46	11	0.42	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	2-Methylphenol		N	U	0.96	11	0.86	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	2-Chlorophenol		N	U	1.8	11	1.7	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	2,4,5-Trichlorophenol		N	U	1.7	11	1.5	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Acetophenone		N	U	0.89	11	0.80	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	Nitrobenzene		N	U	0.94	22	0.84	ug/l	U
MB-MW-03-20130410	4/10/2013	4/17/2013	3-Nitroaniline		N	U	3.6	56	3.2	ug/l	U
MB-MW-04-20130410	4/10/2013	4/23/2013	Aroclor-1260		N	U	0.0014	0.010	0.0014	ug/l	U
MB-MW-04-20130410	4/10/2013	4/23/2013	Aroclor-1254		N	U	0.0024	0.010	0.0023	ug/l	U
MB-MW-04-20130410	4/10/2013	4/23/2013	Aroclor-1268		N	U	0.0028	0.010	0.0027	ug/l	U
MB-MW-04-20130410	4/10/2013	4/23/2013	Aroclor-1221		N	U	0.0026	0.010	0.0025	ug/l	U
MB-MW-04-20130410	4/10/2013	4/23/2013	Aroclor-1232		N	U	0.0031	0.010	0.0029	ug/l	U
MB-MW-04-20130410	4/10/2013	4/23/2013	Aroclor-1248		N	U	0.0024	0.010	0.0023	ug/l	U
MB-MW-04-20130410	4/10/2013	4/23/2013	Aroclor-1016		N	U	0.0026	0.010	0.0025	ug/l	U
MB-MW-04-20130410	4/10/2013	4/23/2013	PCBs (total)	0.025	Y		0.0031	0.010	0.0029	ug/l	
MB-MW-04-20130410	4/10/2013	4/23/2013	Aroclor-1262		N	U	0.0021	0.010	0.0021	ug/l	U
MB-MW-04-20130410	4/10/2013	4/23/2013	Aroclor-1242	0.025	Y		0.0019	0.010	0.0019	ug/l	J
MB-MW-04-20130410	4/10/2013	4/17/2013	4-Nitroaniline		N	U	1.7	51	1.7	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	4-Nitrophenol		N	U	6.5	51	6.5	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Benzaldehyde		N	U	1.5	10	1.5	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	4-Bromophenyl-phenyl ether		N	U	0.64	10	0.64	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Caprolactam		N	U	12	51	12	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	2,4-Dimethylphenol		N	U	0.86	10	0.85	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	4-Chloroaniline		N	U	0.89	10	0.89	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	2,2'-oxybis(1-Chloropropane)		N	U	0.20	2.0	0.20	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Phenol		N	U	0.59	2.0	0.58	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	bis(2-Chloroethyl) ether		N	U	0.25	2.0	0.25	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	bis(2-Chloroethoxy)methane		N	U	0.59	10	0.58	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	bis(2-Ethylhexyl)phthalate		N	U	13	20	13	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Di-n-octylphthalate		N	U	2.1	10	2.1	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Hexachlorobenzene		N	U	0.18	2.0	0.18	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Anthracene	0.36	Y	J	0.16	2.0	0.15	ug/l	J
MB-MW-04-20130410	4/10/2013	4/17/2013	2,4-Dichlorophenol		N	U	0.34	2.0	0.33	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	2,4-Dinitrotoluene		N	U	0.54	10	0.54	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Pyrene		N	U	0.16	2.0	0.16	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Dimethyl phthalate		N	U	0.77	10	0.77	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Dibenzofuran		N	U	0.62	10	0.62	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Atrazine		N	U	0.90	10	0.89	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Benzo(g,h,i)perylene		N	U	0.15	2.0	0.15	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Indeno(1,2,3-cd)pyrene		N	U	0.20	2.0	0.20	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Benzo(b)fluoranthene		N	U	0.16	2.0	0.16	ug/l	U

sys_sample_code	sample _date	analysis _date	chemical_name	result _value	detect _flag	lab_ qualifiers	method_ detection _limit	reporting_ detection _limit	quantitation _limit	result _unit	validator _qualifier
MB-MW-04-20130410	4/10/2013	4/17/2013	Fluoranthene		N	U	0.16	2.0	0.16	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Benzo(k)fluoranthene		N	U	0.55	2.0	0.55	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Acenaphthylene		N	U	0.15	2.0	0.15	ug/l	UJ
MB-MW-04-20130410	4/10/2013	4/17/2013	Chrysene		N	U	0.14	2.0	0.14	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Benzo(a)pyrene		N	U	0.14	2.0	0.13	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	2,4-Dinitrophenol		N	U	6.2	51	6.1	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	4,6-Dinitro-2-methylphenol		N	U	2.2	51	2.2	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Dibenz(a,h)anthracene		N	U	0.16	2.0	0.16	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Benzo(a)anthracene		N	U	0.15	2.0	0.15	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	4-Chloro-3-methylphenol		N	U	0.76	10	0.75	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	2,6-Dinitrotoluene		N	U	0.81	10	0.80	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	N-Nitroso-di-n-propylamine		N	U	0.31	2.0	0.31	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	3&4-Methylphenol		N	U	0.91	10	0.90	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Hexachloroethane		N	U	0.63	10	0.63	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	4-Chlorophenyl-phenyl ether		N	U	0.51	10	0.50	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Hexachlorocyclopentadiene		N	U	0.52	10	0.52	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Isophorone		N	U	0.65	10	0.64	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Acenaphthene		N	U	0.15	2.0	0.14	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Diethylphthalate		N	U	1.5	10	1.5	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Di-n-butyl phthalate		N	U	1.3	10	1.2	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Phenanthrene		N	U	0.43	2.0	0.43	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Butylbenzylphthalate		N	U	1.4	10	1.4	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	N-Nitrosodiphenylamine		N	U	0.86	10	0.85	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Fluorene		N	U	0.22	2.0	0.22	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Carbazole		N	U	0.16	2.0	0.16	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Hexachlorobutadiene		N	U	0.17	2.0	0.17	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Pentachlorophenol		N	U	0.67	10	0.66	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	2,4,6-Trichlorophenol		N	U	1.8	10	1.7	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	2-Nitroaniline		N	U	3.6	51	3.5	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	2-Nitrophenol		N	U	1.7	10	1.7	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Naphthalene		N	U	0.14	2.0	0.14	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	2-Methylnaphthalene		N	U	0.12	2.0	0.12	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	2-Chloronaphthalene		N	U	0.15	2.0	0.15	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	3,3'-Dichlorobenzidine		N	U	1.1	10	1.1	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Biphenyl		N	U	0.42	10	0.42	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	2-Methylphenol		N	U	0.87	10	0.86	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	2-Chlorophenol		N	U	1.7	10	1.7	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	2,4,5-Trichlorophenol		N	U	1.5	10	1.5	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Acetophenone		N	U	0.81	10	0.80	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	Nitrobenzene		N	U	0.85	20	0.84	ug/l	U
MB-MW-04-20130410	4/10/2013	4/17/2013	3-Nitroaniline		N	U	3.2	51	3.2	ug/l	U
MB-MW-05-20130411	4/11/2013	4/23/2013	Aroclor-1260		N	U	0.0015	0.011	0.0014	ug/l	U
MB-MW-05-20130411	4/11/2013	4/23/2013	Aroclor-1254		N	U	0.0025	0.011	0.0023	ug/l	U
MB-MW-05-20130411	4/11/2013	4/23/2013	Aroclor-1268		N	U	0.0029	0.011	0.0027	ug/l	U

sys_sample_code	sample _date	analysis _date	chemical_name	result _value	detect _flag	lab_ qualifiers	method_ detection _limit	reporting_ detection _limit	quantitation _limit	result _unit	validator _qualifier
MB-MW-05-20130411	4/11/2013	4/23/2013	Aroclor-1221		N	U	0.0027	0.011	0.0025	ug/l	U
MB-MW-05-20130411	4/11/2013	4/23/2013	Aroclor-1232		N	U	0.0032	0.011	0.0029	ug/l	U
MB-MW-05-20130411	4/11/2013	4/23/2013	Aroclor-1248		N	U	0.0024	0.011	0.0023	ug/l	U
MB-MW-05-20130411	4/11/2013	4/23/2013	Aroclor-1016		N	U	0.0027	0.011	0.0025	ug/l	U
MB-MW-05-20130411	4/11/2013	4/23/2013	PCBs (total)		N	U	0.0032	0.011	0.0029	ug/l	U
MB-MW-05-20130411	4/11/2013	4/23/2013	Aroclor-1262		N	U	0.0022	0.011	0.0021	ug/l	U
MB-MW-05-20130411	4/11/2013	4/23/2013	Aroclor-1242		N	U	0.0020	0.011	0.0019	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	4-Nitroaniline		N	U	2.0	59	1.7	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	4-Nitrophenol		N	U	7.6	59	6.5	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Benzaldehyde		N	U	1.8	12	1.5	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	4-Bromophenyl-phenyl ether		N	U	0.75	12	0.64	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Caprolactam		N	U	14	59	12	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	2,4-Dimethylphenol	120	Y		1.0	12	0.85	ug/l	
MB-MW-05-20130411	4/11/2013	4/17/2013	4-Chloroaniline		N	U	1.0	12	0.89	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	2,2'-oxybis(1-Chloropropane)		N	U	0.23	2.4	0.20	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Phenol		N	U	0.68	2.4	0.58	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	bis(2-Chloroethyl) ether		N	U	0.30	2.4	0.25	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	bis(2-Chloroethoxy)methane		N	U	0.68	12	0.58	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	bis(2-Ethylhexyl)phthalate		N	U	15	24	13	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Di-n-octylphthalate		N	U	2.4	12	2.1	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Hexachlorobenzene		N	U	0.22	2.4	0.18	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Anthracene	1.7	Y	J	0.18	2.4	0.15	ug/l	J
MB-MW-05-20130411	4/11/2013	4/17/2013	2,4-Dichlorophenol	0.58	Y	J	0.39	2.4	0.33	ug/l	J
MB-MW-05-20130411	4/11/2013	4/17/2013	2,4-Dinitrotoluene		N	U	0.63	12	0.54	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Pyrene	3.3	Y		0.18	2.4	0.16	ug/l	
MB-MW-05-20130411	4/11/2013	4/17/2013	Dimethyl phthalate		N	U	0.90	12	0.77	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Dibenzofuran	1.3	Y	J	0.73	12	0.62	ug/l	J
MB-MW-05-20130411	4/11/2013	4/17/2013	Atrazine		N	U	1.0	12	0.89	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Benzo(g,h,i)perylene		N	U	0.18	2.4	0.15	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Indeno(1,2,3-cd)pyrene		N	U	0.23	2.4	0.20	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Benzo(b)fluoranthene		N	U	0.18	2.4	0.16	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Fluoranthene	5.5	Y		0.19	2.4	0.16	ug/l	
MB-MW-05-20130411	4/11/2013	4/17/2013	Benzo(k)fluoranthene		N	U	0.64	2.4	0.55	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Acenaphthylene	1.2	Y	J	0.18	2.4	0.15	ug/l	J
MB-MW-05-20130411	4/11/2013	4/17/2013	Chrysene		N	U	0.16	2.4	0.14	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Benzo(a)pyrene		N	U	0.16	2.4	0.13	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	2,4-Dinitrophenol		N	U	7.2	59	6.1	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	4,6-Dinitro-2-methylphenol		N	U	2.6	59	2.2	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Dibenz(a,h)anthracene		N	U	0.18	2.4	0.16	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Benzo(a)anthracene		N	U	0.17	2.4	0.15	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	4-Chloro-3-methylphenol		N	U	0.89	12	0.75	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	2,6-Dinitrotoluene		N	U	0.94	12	0.80	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	N-Nitroso-di-n-propylamine		N	U	0.36	2.4	0.31	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	3&4-Methylphenol		N	U	1.1	12	0.90	ug/l	U

sys_sample_code	sample _date	analysis _date	chemical_name	result _value	detect _flag	lab_ qualifiers	method_ detection _limit	reporting_ detection _limit	quantitation _limit	result _unit	validator _qualifier
MB-MW-05-20130411	4/11/2013	4/17/2013	Hexachloroethane		N	U	0.74	12	0.63	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	4-Chlorophenyl-phenyl ether		N	U	0.59	12	0.50	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Hexachlorocyclopentadiene		N	U	0.61	12	0.52	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Isophorone		N	U	0.76	12	0.64	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Acenaphthene	16	Y		0.17	2.4	0.14	ug/l	
MB-MW-05-20130411	4/11/2013	4/17/2013	Diethylphthalate		N	U	1.7	12	1.5	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Di-n-butyl phthalate		N	U	1.5	12	1.2	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Phenanthrene		N	U	0.50	2.4	0.43	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Butylbenzylphthalate		N	U	1.7	12	1.4	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	N-Nitrosodiphenylamine		N	U	1.0	12	0.85	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Fluorene	1.0	Y	J	0.25	2.4	0.22	ug/l	J
MB-MW-05-20130411	4/11/2013	4/17/2013	Carbazole	3.1	Y		0.19	2.4	0.16	ug/l	
MB-MW-05-20130411	4/11/2013	4/17/2013	Hexachlorobutadiene		N	U	0.20	2.4	0.17	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Pentachlorophenol		N	U	0.78	12	0.66	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	2,4,6-Trichlorophenol		N	U	2.1	12	1.7	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	2-Nitroaniline		N	U	4.1	59	3.5	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	2-Nitrophenol		N	U	2.0	12	1.7	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Naphthalene		N	U	0.16	2.4	0.14	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	2-Methylnaphthalene		N	U	0.14	2.4	0.12	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	2-Chloronaphthalene		N	U	0.18	2.4	0.15	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	3,3'-Dichlorobenzidine		N	U	1.3	12	1.1	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Biphenyl		N	U	0.49	12	0.42	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	2-Methylphenol		N	U	1.0	12	0.86	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	2-Chlorophenol		N	U	1.9	12	1.7	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	2,4,5-Trichlorophenol		N	U	1.8	12	1.5	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Acetophenone		N	U	0.94	12	0.80	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	Nitrobenzene		N	U	0.99	24	0.84	ug/l	U
MB-MW-05-20130411	4/11/2013	4/17/2013	3-Nitroaniline		N	U	3.8	59	3.2	ug/l	U
MB-MW-06-20130411	4/11/2013	4/23/2013	Aroclor-1260		N	U	0.0014	0.011	0.0014	ug/l	U
MB-MW-06-20130411	4/11/2013	4/23/2013	Aroclor-1254		N	U	0.0024	0.011	0.0023	ug/l	U
MB-MW-06-20130411	4/11/2013	4/23/2013	Aroclor-1268		N	U	0.0029	0.011	0.0027	ug/l	U
MB-MW-06-20130411	4/11/2013	4/23/2013	Aroclor-1221		N	U	0.0026	0.011	0.0025	ug/l	U
MB-MW-06-20130411	4/11/2013	4/23/2013	Aroclor-1232		N	U	0.0031	0.011	0.0029	ug/l	U
MB-MW-06-20130411	4/11/2013	4/23/2013	Aroclor-1248		N	U	0.0024	0.011	0.0023	ug/l	U
MB-MW-06-20130411	4/11/2013	4/23/2013	Aroclor-1016		N	U	0.0026	0.011	0.0025	ug/l	U
MB-MW-06-20130411	4/11/2013	4/23/2013	PCBs (total)		N	U	0.0031	0.011	0.0029	ug/l	U
MB-MW-06-20130411	4/11/2013	4/23/2013	Aroclor-1262		N	U	0.0022	0.011	0.0021	ug/l	U
MB-MW-06-20130411	4/11/2013	4/23/2013	Aroclor-1242		N	U	0.0020	0.011	0.0019	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	4-Nitroaniline		N	U	2.0	57	1.7	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	4-Nitrophenol		N	U	7.4	57	6.5	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Benzaldehyde		N	U	1.7	11	1.5	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	4-Bromophenyl-phenyl ether		N	U	0.72	11	0.64	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Caprolactam		N	U	14	57	12	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	2,4-Dimethylphenol		N	U	0.97	11	0.85	ug/l	U

sys_sample_code	sample _date	analysis _date	chemical_name	result _value	detect _flag	lab_ qualifiers	method_ detection _limit	reporting_ detection _limit	quantitation _limit	result _unit	validator _qualifier
MB-MW-06-20130411	4/11/2013	4/17/2013	4-Chloroaniline		N	U	1.0	11	0.89	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	2,2'-oxybis(1-Chloropropane)		N	U	0.22	2.3	0.20	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Phenol		N	U	0.66	2.3	0.58	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	bis(2-Chloroethyl) ether		N	U	0.29	2.3	0.25	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	bis(2-Chloroethoxy)methane		N	U	0.66	11	0.58	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	bis(2-Ethylhexyl)phthalate		N	U	14	23	13	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Di-n-octylphthalate		N	U	2.3	11	2.1	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Hexachlorobenzene		N	U	0.21	2.3	0.18	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Anthracene	0.46	Y	J	0.18	2.3	0.15	ug/l	J
MB-MW-06-20130411	4/11/2013	4/17/2013	2,4-Dichlorophenol		N	U	0.38	2.3	0.33	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	2,4-Dinitrotoluene		N	U	0.61	11	0.54	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Pyrene		N	U	0.18	2.3	0.16	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Dimethyl phthalate		N	U	0.87	11	0.77	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Dibenzofuran		N	U	0.70	11	0.62	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Atrazine		N	U	1.0	11	0.89	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Benzo(g,h,i)perylene		N	U	0.17	2.3	0.15	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Indeno(1,2,3-cd)pyrene		N	U	0.23	2.3	0.20	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Benzo(b)fluoranthene		N	U	0.18	2.3	0.16	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Fluoranthene	0.30	Y	J	0.18	2.3	0.16	ug/l	J
MB-MW-06-20130411	4/11/2013	4/17/2013	Benzo(k)fluoranthene		N	U	0.62	2.3	0.55	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Acenaphthylene		N	U	0.17	2.3	0.15	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Chrysene		N	U	0.16	2.3	0.14	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Benzo(a)pyrene		N	U	0.15	2.3	0.13	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	2,4-Dinitrophenol		N	U	7.0	57	6.1	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	4,6-Dinitro-2-methylphenol		N	U	2.5	57	2.2	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Dibenz(a,h)anthracene		N	U	0.18	2.3	0.16	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Benzo(a)anthracene		N	U	0.17	2.3	0.15	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	4-Chloro-3-methylphenol		N	U	0.86	11	0.75	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	2,6-Dinitrotoluene		N	U	0.91	11	0.80	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	N-Nitroso-di-n-propylamine		N	U	0.35	2.3	0.31	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	3&4-Methylphenol		N	U	1.0	11	0.90	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Hexachloroethane		N	U	0.71	11	0.63	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	4-Chlorophenyl-phenyl ether		N	U	0.57	11	0.50	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Hexachlorocyclopentadiene		N	U	0.59	11	0.52	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Isophorone		N	U	0.73	11	0.64	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Acenaphthene		N	U	0.16	2.3	0.14	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Diethylphthalate		N	U	1.7	11	1.5	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Di-n-butyl phthalate		N	U	1.4	11	1.2	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Phenanthrene		N	U	0.49	2.3	0.43	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Butylbenzylphthalate		N	U	1.6	11	1.4	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	N-Nitrosodiphenylamine		N	U	0.97	11	0.85	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Fluorene		N	U	0.25	2.3	0.22	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Carbazole		N	U	0.18	2.3	0.16	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Hexachlorobutadiene		N	U	0.19	2.3	0.17	ug/l	U

sys_sample_code	sample _date	analysis _date	chemical_name	result _value	detect _flag	lab_ qualifiers	method_ detection _limit	reporting_ detection _limit	quantitation _limit	result _unit	validator _qualifier
MB-MW-06-20130411	4/11/2013	4/17/2013	Pentachlorophenol		N	U	0.75	11	0.66	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	2,4,6-Trichlorophenol		N	U	2.0	11	1.7	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	2-Nitroaniline		N	U	4.0	57	3.5	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	2-Nitrophenol		N	U	1.9	11	1.7	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Naphthalene		N	U	0.16	2.3	0.14	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	2-Methylnaphthalene		N	U	0.14	2.3	0.12	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	2-Chloronaphthalene		N	U	0.17	2.3	0.15	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	3,3'-Dichlorobenzidine		N	U	1.3	11	1.1	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Biphenyl		N	U	0.47	11	0.42	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	2-Methylphenol		N	U	0.98	11	0.86	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	2-Chlorophenol		N	U	1.9	11	1.7	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	2,4,5-Trichlorophenol		N	U	1.7	11	1.5	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Acetophenone		N	U	0.91	11	0.80	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	Nitrobenzene		N	U	0.96	23	0.84	ug/l	U
MB-MW-06-20130411	4/11/2013	4/17/2013	3-Nitroaniline		N	U	3.7	57	3.2	ug/l	U

SECTION 3

ORGANIC DATA SUPPORT DOCUMENTATION

ENVIRONMENTAL STANDARDS

ORGANIC ANALYSIS SUPPORT DOCUMENTATION

ESI project name: ENVIRON - Metal
Sample Collection Dates: Bank LTM
Job Number: 4/10/13 & 4/11/13
Project Manager: 20115843.A000
Laboratory: STZ
TA PITTSBURGH

Reviewed by: Diana Chan
Approved by: STZ
Completion Date: 6/4/13

Applicable Sample No's ( ) Refer to Table 1 in the Quality Assurance Review

Deliverable:			Sample No.	Lab Control No.
	CLP (Full)	(X)	180-20360-1	
	Level IV (Full)	( )		
	Limited	(~~✓~~) ~~2B~~ DC		
	Other:			

The following table indicates criteria that were examined, the identified problems, and support documentation attachments

	Criteria Examined in Detail					Problems Identified					Support Documentation Attachments				
	Check (√) if Yes or Footnote Letter for Comments Below					Check (√) if Yes or Footnote Letter for Comments Below					Check (√) if Yes or Footnote Letter for Comments Below				
	8270D		8082A			8270D		8082A			8270D		8082A		
Holding Times	✓		✓								✓		✓		
Blank Analysis: Target Cmpds	✓		✓								✓		✓		
Sys Montr Cmps/Surrogates	✓		✓								✓		✓		
Matrix Spike/Matrix Spike Duplicate	✓		✓			✓					✓		✓		
Blank Spike	✓		✓								✓		✓		
Duplicate Analysis (✓) Field ( ) Lab	✓		✓			✓		✓			✓		✓		
Detection Limit/Sensitivity															
Qualitative Identification: Target Cmpds	✓		✓								✓		✓		
Qualitative Identification: TICs															
DFTPP & BFB Mass Tuning	✓										✓				
GC Instrument Performance															
Initial Calibrations	✓		✓								✓		✓		
Continuing Calibrations	✓		✓								✓		✓		
Quantitation of Results	✓		✓								✓		✓		
DDT/Endrin Breakdown															
Surrogate Retention Time Shifts															
Internal Standards Performance	✓										✓				
Resolution Check Standards															
Analytical Sequence	✓		✓								✓		✓		
Florisil Cartridge & GPC Calibration															
GC Column Agreement															
Condition Upon Receipt	✓		✓								✓		✓		
Percent Solids															
Others:															

Comments:

ENVIRONMENTAL STANDARDS

BLANK ANALYSIS RESULTS FOR ORGANIC PARAMETERS

Fraction (1)	Matrix (Aq., S)	Blank Type (2)	Blank Sample Number	Contaminant	Concentration (µg/L)	Qualification Limit
						5×
S	Aq	MB	180-69228/A-1	All<MDL		
S	Aq	FB	180-20360-8	All<MDL		
S	Aq	FB	180-20360-9	All<MDL		
P	Aq	MB	180-69224/A1-C	All<MDL		
P	Aq	FB	180-20360-8	All<MDL		
P	Aq	FB	180-20360-9	All<MDL		

ENVIRONMENTAL STANDARDS

BLANK ANALYSIS RESULTS FOR ORGANIC PARAMETERS

1 - S = Semivolatile; P = PCB

2 - MB = Method Blank; TB = Trip Blank; EB = Equipment Blank; FB = Field Blank; IB = Instrument Blank; PB = Procedural Blank

Notes:

EVALUATION OF DUPLICATE ANALYSIS PRECISION

Units ug/L	PRECISION OBJECTIVES[1]	
	Analyte > or = 5 X RL	RPD < or = 20
	Analyte < 5 X RL	Difference < or = RL Times 1

ANALYTE	MB-MW-04-20130410 Analyte Concentration[2]	Qual	RL	DUP-20130410 Analyte Concentration[2]	Qual	RL	Difference	RPD	Notes
acenaphthene	0.15	U	2.0	2.8		2.0	2.65	NA	2
anthracene	0.36		2.0	0.4		2.0	0.04	NA	IN
fluorene	0.22	U	2.0	1.3		2.0	1.08	NA	IN
							NA	#DIV/0!	#DIV/0!
PCB-1242	0.025		0.010	0.043		0.011	0.018	NA	2
PCB-1260	0.0014	U	0.010	0.0049		0.011	0.0035	NA	IN

EVALUATION OF DUPLICATE ANALYSIS PRECISION

NOTES:
Qual) Column to enter J, U, U*, or B
RPD) Relative Percent Difference
RL) Reporting Limit
J) The analyte concentration should be considered estimated.
U) The analyte was not-detected in the sample. The numerical value will be used for comparison purposes.
U* or B) The result was blank qualified. The numerical value will be used for comparison purposes.
NA) The RPD or Difference is not applicable.
1) Both results are > or = 5 X RL and RPD over acceptance limit, flag positive results "J".
2) At least one of the results is < 5 X RL and difference is over acceptance limit, flag positive results "J" and "not-detected" results "UJ".
Comments:

Client: ENVIRON International Corp.

Job Number: 180-20360-1

Surrogate Recovery Report

8270D Semivolatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	2FP %Rec	PHL %Rec	NBZ %Rec	FBP %Rec	TBP %Rec	TPH %Rec
180-20360-1	MB-MW-01-20130410	61	62	61	66	82	66
180-20360-2	MB-MW-02-20130410	60	60	61	63	86	52
180-20360-3	MB-MW-03-20130410	56	59	56	58	76	72
180-20360-4	MB-MW-04-20130410	63	62	62	66	79	60
180-20360-5	MB-MW-05-20130411	55	55	59	63	82	66
180-20360-6	MB-MW-06-20130411	64	66	63	67	83	75
180-20360-7	DUP-20130410	61	60	60	62	77	61
180-20360-8	MB-FB-20130410	71	73	67	67	79	82
180-20360-9	MB-FB-20130411	72	74	65	67	77	83
MB 180-69228/1-A		76	77	64	63	70	72
LCS 180-69228/2-A	MB-MW-02-(MS-20130410	68	67	58	60	69	67
180-20360-2 MS	~~MB-MW-02-20130410~~ MS	61	58	60	50	75	43
180-20360-2 MSD	~~MB-MW-02-20130410~~ MSD	58	56	59	47	72	44
	MB-MW-02-MSD-20130410	✓	✓	✓	✓	✓	✓

Surrogate	Acceptance Limits
2FP = 2-Fluorophenol (Surr)	26-100
PHL = Phenol-d5 (Surr)	30-102
NBZ = Nitrobenzene-d5 (Surr)	37-104
FBP = 2-Fluorobiphenyl	35-108
TBP = 2,4,6-Tribromophenol (Surr)	33-122
TPH = Terphenyl-d14 (Surr)	25-130

Client: ENVIRON International Corp.

Job Number: 180-20360-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 180-69228

Method: 8270D
Preparation: 3520C

MS Lab Sample ID:	180-20360-2	Analysis Batch:	180-69484	Instrument ID:	733
Client Matrix:	Water	Prep Batch:	180-69228	Lab File ID:	N0417017.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	980 mL
Analysis Date:	04/17/2013 1840			Final Weight/Volume:	10.0 mL
Prep Date:	04/16/2013 0804			Injection Volume:	2 uL
Leach Date:	N/A				

MSD Lab Sample ID:	180-20360-2	Analysis Batch:	180-69484	Instrument ID:	733
Client Matrix:	Water	Prep Batch:	180-69228	Lab File ID:	N0417018.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	980 mL
Analysis Date:	04/17/2013 1908			Final Weight/Volume:	10.0 mL
Prep Date:	04/16/2013 0804			Injection Volume:	2 uL
Leach Date:	N/A				

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	60	58	39 - 106	4	32		
Acenaphthylene	65	62	40 - 113	4	33		
Anthracene	54	52	37 - 108	3	40		
Benzo[a]anthracene	50	49	40 - 103	1	33		
Benzo[a]pyrene ↓	35	34	37 - 105	2	35	F	F
Benzo[b]fluoranthene ↓	32	31	35 - 100	4	44	F	F
Benzo[g,h,i]perylene	37	37	31 - 118	1	45		
Benzo[k]fluoranthene ↓	33	33	37 - 108	1	42	F	F
Bis(2-ethylhexyl) phthalate	48	49	35 - 112	1	34		
2,2'-oxybis[1-chloropropane]	50	46	30 - 100	8	38		
4-Bromophenyl phenyl ether	56	54	38 - 108	4	40		
Butyl benzyl phthalate	45	44	34 - 110	0	35		
Carbazole	68	65	35 - 113	4	32		
4-Chloroaniline	47	46	26 - 99	3	55		
2-Chloronaphthalene	59	57	37 - 102	4	34		
4-Chlorophenyl phenyl ether	56	54	39 - 107	3	34		
Chrysene	49	48	39 - 103	3	38		
Dibenz(a,h)anthracene ↓	30	29	32 - 117	2	43	F	F
Dibenzofuran	60	59	37 - 107	2	32		
Di-n-butyl phthalate	49	48	36 - 113	2	39		
3,3'-Dichlorobenzidine ↓ "R" NDs	4	4	11 - 106	5	56	J F	J F
Diethyl phthalate	68	65	39 - 112	6	32		
Dimethyl phthalate	68	66	40 - 110	3	33		
2,4-Dinitrotoluene	76	74	41 - 117	3	32		
2,6-Dinitrotoluene	76	73	42 - 118	4	33		
Di-n-octyl phthalate	30	30	27 - 118	1	36		
Fluoranthene	52	49	35 - 111	5	43		
Fluorene	60	59	39 - 107	3	33		
Hexachlorobenzene	53	52	35 - 106	3	36		
Hexachlorobutadiene	35	34	30 - 103	2	41		
Hexachlorocyclopentadiene	31	30	19 - 116	4	57		
Hexachloroethane	41	39	27 - 94	4	43		
Indeno[1,2,3-cd]pyrene	35	35	32 - 116	1	45		

↓ recoveries
J(+)s & UJ NDs
parent sample

Client: ENVIRON International Corp.

Job Number: 180-20360-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 180-69228

Method: 8270D
Preparation: 3520C

MS Lab Sample ID:	180-20360-2	Analysis Batch:	180-69484	Instrument ID:	733
Client Matrix:	Water	Prep Batch:	180-69228	Lab File ID:	N0417017.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	980 mL
Analysis Date:	04/17/2013 1840			Final Weight/Volume:	10.0 mL
Prep Date:	04/16/2013 0804			Injection Volume:	2 uL
Leach Date:	N/A				

MSD Lab Sample ID:	180-20360-2	Analysis Batch:	180-69484	Instrument ID:	733
Client Matrix:	Water	Prep Batch:	180-69228	Lab File ID:	N0417018.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	980 mL
Analysis Date:	04/17/2013 1908			Final Weight/Volume:	10.0 mL
Prep Date:	04/16/2013 0804			Injection Volume:	2 uL
Leach Date:	N/A				

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Isophorone	59	58	39 - 108	2	36		
2-Methylnaphthalene	54	53	36 - 101	3	35		
Naphthalene	53	52	35 - 98	3	39		
2-Nitroaniline	67	64	37 - 114	5	33		
3-Nitroaniline	44	48	32 - 117	9	46		
4-Nitroaniline	64	58	32 - 117	10	39		
4-Nitrophenol	60	59	29 - 120	1	39		
Nitrobenzene	62	59	37 - 103	5	34		
N-Nitrosodi-n-propylamine	60	58	37 - 106	2	36		
N-Nitrosodiphenylamine	61	60	34 - 108	2	42		
Phenanthrene	55	53	34 - 107	3	34		
Pyrene	43	44	36 - 115	2	38		
4-Chloro-3-methylphenol	63	63	40 - 107	1	32		
2-Chlorophenol	59	57	34 - 100	4	31		
2-Methylphenol	60	59	34 - 101	3	34		
Methylphenol, 3 & 4	74	72	34 - 104	3	34		
2,4-Dichlorophenol	63	63	34 - 106	0	33		
2,4-Dimethylphenol	67	66	34 - 98	1	34		
2,4-Dinitrophenol	79	74	3 - 125	7	62		
4,6-Dinitro-2-methylphenol	73	74	24 - 121	1	50		
2-Nitrophenol	67	66	33 - 108	2	41		
Pentachlorophenol	61	60	10 - 118	2	49		
Phenol	52	51	35 - 98	3	35		
2,4,5-Trichlorophenol	67	68	31 - 111	1	32		
2,4,6-Trichlorophenol	66	64	34 - 110	3	35		
Acetophenone	59	56	30 - 150	6	30		
Atrazine	53	51	30 - 150	4	30		
Benzaldehyde	40	37	30 - 150	7	30		
1,1'-Biphenyl	55	52	10 - 140	5	30		
Caprolactam	47	47	10 - 140	0	30		
Bis(2-chloroethoxy)methane	62	60	36 - 101	3	35		
Bis(2-chloroethyl)ether	59	57	34 - 96	3	34		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits

Client: ENVIRON International Corp.

Job Number: 180-20360-1

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Nitrobenzene-d5 (Surr)	60	59	37 - 104
Phenol-d5 (Surr)	58	56	30 - 102
2-Fluorobiphenyl	50	47	35 - 108
2,4,6-Tribromophenol (Surr)	75	72	33 - 122
2-Fluorophenol (Surr)	61	58	26 - 100
Terphenyl-d14 (Surr)	43	44	25 - 130

Client: ENVIRON International Corp.

Job Number: 180-20360-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 180-69228

Method: 8270D
Preparation: 3520C

MS Lab Sample ID:	180-20360-2	Units:	ug/L	MSD Lab Sample ID:	180-20360-2
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/17/2013 1840			Analysis Date:	04/17/2013 1908
Prep Date:	04/16/2013 0804			Prep Date:	04/16/2013 0804
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual		MSD Result/Qual	
Acenaphthene	ND		204	204	123		118	
Acenaphthylene	ND		204	204	133		127	
Anthracene	0.37	J	204	204	110		107	
Benzo[a]anthracene	ND		204	204	101		100	
Benzo[a]pyrene	ND		204	204	71.4	F	69.8	F
Benzo[b]fluoranthene	ND		204	204	65.8	F	62.9	F
Benzo[g,h,i]perylene	ND		204	204	76.3		75.9	
Benzo[k]fluoranthene	ND		204	204	66.8	F	67.1	F
Bis(2-ethylhexyl) phthalate	ND		204	204	98.0		99.0	
2,2'-oxybis[1-chloropropane]	ND		204	204	101		93.7	
4-Bromophenyl phenyl ether	ND		204	204	114		110	
Butyl benzyl phthalate	ND		204	204	90.9		90.7	
Carbazole	ND		204	204	139		133	
4-Chloroaniline	ND		204	204	96.0		93.2	
2-Chloronaphthalene	ND		204	204	121		116	
4-Chlorophenyl phenyl ether	ND		204	204	114		110	
Chrysene	ND		204	204	101		97.9	
Dibenz(a,h)anthracene	ND		204	204	61.3	F	60.2	F
Dibenzofuran	ND		204	204	122		120	
Di-n-butyl phthalate	ND		204	204	101		98.3	
3,3'-Dichlorobenzidine	ND		204	204	7.60	J F	7.97	J F
Diethyl phthalate	ND		204	204	140		132	
Dimethyl phthalate	ND		204	204	139		135	
2,4-Dinitrotoluene	ND		204	204	156		151	
2,6-Dinitrotoluene	ND		204	204	155		149	
Di-n-octyl phthalate	ND		204	204	60.4		60.9	
Fluoranthene	ND		204	204	105		99.9	
Fluorene	ND		204	204	123		120	
Hexachlorobenzene	ND		204	204	109		106	
Hexachlorobutadiene	ND		204	204	70.8		69.4	
Hexachlorocyclopentadiene	ND		204	204	63.5		61.1	
Hexachloroethane	ND		204	204	82.9		79.9	
Indeno[1,2,3-cd]pyrene	ND		204	204	71.8		70.9	
Isophorone	2.2	J	204	204	122		120	
2-Methylnaphthalene	ND		204	204	111		108	
Naphthalene	ND		204	204	109		106	
2-Nitroaniline	ND		204	204	136		130	
3-Nitroaniline	ND		204	204	90.1		98.9	
4-Nitroaniline	ND		204	204	130		118	
4-Nitrophenol	ND		204	204	123		121	
Nitrobenzene	ND		204	204	127		121	
N-Nitrosodi-n-propylamine	ND		204	204	122		119	
N-Nitrosodiphenylamine	ND		204	204	124		122	

Client: ENVIRON International Corp.

Job Number: 180-20360-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 180-69228

Method: 8270D
Preparation: 3520C

MS Lab Sample ID:	180-20360-2	Units: ug/L	MSD Lab Sample ID:	180-20360-2	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	04/17/2013 1840		Analysis Date:	04/17/2013 1908	
Prep Date:	04/16/2013 0804		Prep Date:	04/16/2013 0804	
Leach Date:	N/A		Leach Date:	N/A	

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Phenanthrene	ND	204	204	112	109
Pyrene	ND	204	204	88.7	90.5
4-Chloro-3-methylphenol	ND	204	204	130	128
2-Chlorophenol	ND	204	204	120	116
2-Methylphenol	ND	204	204	123	120
Methylphenol, 3 & 4	ND	408	408	303	294
2,4-Dichlorophenol	ND	204	204	129	129
2,4-Dimethylphenol	65 ✓	204	204	202 ✓	199 ✓
2,4-Dinitrophenol	ND	204	204	161	151
4,6-Dinitro-2-methylphenol	ND	204	204	149	150
2-Nitrophenol	ND	204	204	137	135
Pentachlorophenol	ND	204	204	125	123
Phenol	ND	204	204	107	104
2,4,5-Trichlorophenol	ND	204	204	138	139
2,4,6-Trichlorophenol	ND	204	204	135	131
Acetophenone	ND	204	204	121	114
Atrazine	ND	204	204	109	105
Benzaldehyde	ND	204	204	81.8	75.9
1,1'-Biphenyl	ND	204	204	112	106
Caprolactam	ND	204	204	95.6	95.3
Bis(2-chloroethoxy)methane	ND	204	204	126	123
Bis(2-chloroethyl)ether	ND	204	204	120	116

Client: ENVIRON International Corp.

Job Number: 180-20360-1

Lab Control Sample - Batch: 180-69228

Method: 8270D
Preparation: 3520C

Lab Sample ID:	LCS 180-69228/2-A	Analysis Batch:	180-69484	Instrument ID:	733
Client Matrix:	Water	Prep Batch:	180-69228	Lab File ID:	N0417014.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	04/17/2013 1429	Units:	ug/L	Final Weight/Volume:	10.0 mL
Prep Date:	04/16/2013 0804			Injection Volume:	2 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	200	122	61	39 - 106	
Acenaphthylene	200	133	66	40 - 113	
Anthracene	200	123	61	37 - 108	
Benzo[a]anthracene	200	121	60	40 - 103	
Benzo[a]pyrene	200	124	62	37 - 105	
Benzo[b]fluoranthene	200	116	58	35 - 100	
Benzo[g,h,i]perylene	200	116	58	31 - 118	
Benzo[k]fluoranthene	200	123	62	37 - 108	
Bis(2-ethylhexyl) phthalate	200	113	56	35 - 112	
2,2'-oxybis[1-chloropropane]	200	117	58	30 - 100	
4-Bromophenyl phenyl ether	200	129	64	38 - 108	
Butyl benzyl phthalate	200	120	60	34 - 110	
Carbazole	200	119	59	35 - 113	
4-Chloroaniline	200	123	62	26 - 99	
2-Chloronaphthalene	200	120	60	37 - 102	
4-Chlorophenyl phenyl ether	200	123	62	39 - 107	
Chrysene	200	116	58	39 - 103	
Dibenz(a,h)anthracene	200	87.2	44	32 - 117	
Dibenzofuran	200	120	60	37 - 107	
Di-n-butyl phthalate	200	120	60	36 - 113	
3,3'-Dichlorobenzidine	200	122	61	11 - 106	
Diethyl phthalate	200	121	60	39 - 112	
Dimethyl phthalate	200	121	61	40 - 110	
2,4-Dinitrotoluene	200	129	65	41 - 117	
2,6-Dinitrotoluene	200	134	67	42 - 118	
Di-n-octyl phthalate	200	111	56	27 - 118	
Fluoranthene	200	120	60	35 - 111	
Fluorene	200	122	61	39 - 107	
Hexachlorobenzene	200	124	62	35 - 106	
Hexachlorobutadiene	200	117	59	30 - 103	
Hexachlorocyclopentadiene	200	153	76	19 - 116	
Hexachloroethane	200	117	58	27 - 94	
Indeno[1,2,3-cd]pyrene	200	111	56	32 - 116	
Isophorone	200	118	59	39 - 108	
2-Methylnaphthalene	200	123	61	36 - 101	
Naphthalene	200	119	60	35 - 98	
2-Nitroaniline	200	119	60	37 - 114	
3-Nitroaniline	200	123	62	32 - 117	
4-Nitroaniline	200	121	60	32 - 117	
4-Nitrophenol	200	109	54	29 - 120	
Nitrobenzene	200	119	59	37 - 103	
N-Nitrosodi-n-propylamine	200	127	63	37 - 106	
N-Nitrosodiphenylamine	200	113	56	34 - 108	
Phenanthrene	200	120	60	34 - 107	
Pyrene	200	124	62	36 - 115	
4-Chloro-3-methylphenol	200	120	60	40 - 107	

Client: ENVIRON International Corp.

Job Number: 180-20360-1

Lab Control Sample - Batch: 180-69228

Method: 8270D
Preparation: 3520C

Lab Sample ID:	LCS 180-69228/2-A	Analysis Batch:	180-69484	Instrument ID:	733
Client Matrix:	Water	Prep Batch:	180-69228	Lab File ID:	N0417014.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	04/17/2013 1429	Units:	ug/L	Final Weight/Volume:	10.0 mL
Prep Date:	04/16/2013 0804			Injection Volume:	2 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
2-Chlorophenol	200	126	63	34 - 100	
2-Methylphenol	200	124	62	34 - 101	
Methylphenol, 3 & 4	400	318	79	34 - 104	
2,4-Dichlorophenol	200	122	61	34 - 106	
2,4-Dimethylphenol	200	128	64	34 - 98	
2,4-Dinitrophenol	200	113	56	3 - 125	
4,6-Dinitro-2-methylphenol	200	120	60	24 - 121	
2-Nitrophenol	200	127	64	33 - 108	
Pentachlorophenol	200	114	57	10 - 118	
Phenol	200	122	61	35 - 98	
2,4,5-Trichlorophenol	200	119	59	31 - 111	
2,4,6-Trichlorophenol	200	122	61	34 - 110	
Acetophenone	200	128	64	30 - 150	
Atrazine	200	127	63	30 - 150	
Benzaldehyde	200	173	87	30 - 150	
1,1'-Biphenyl	200	120	60	10 - 140	
Caprolactam	200	118	59	10 - 140	
Bis(2-chloroethoxy)methane	200	119	59	36 - 101	
Bis(2-chloroethyl)ether	200	124	62	34 - 96	

Surrogate	% Rec	Acceptance Limits
Nitrobenzene-d5 (Surr)	58	37 - 104
Phenol-d5 (Surr)	67	30 - 102
2-Fluorobiphenyl	60	35 - 108
2,4,6-Tribromophenol (Surr)	69	33 - 122
2-Fluorophenol (Surr)	68	26 - 100
Terphenyl-d14 (Surr)	67	25 - 130

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab File ID: N0417013.D Lab Sample ID: MB 180-69228/1-A

Matrix: Water Date Extracted: 04/16/2013 08:04

Instrument ID: 733 Date Analyzed: 04/17/2013 12:11

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-69228/2-A	N0417014.D	04/17/2013 14:29
MB-MW-01-20130410	180-20360-1	N0417015.D	04/17/2013 17:44
MB-MW-02-20130410	180-20360-2	N0417016.D	04/17/2013 18:12
MB-MW-02-20130410 MS	180-20360-2 MS	N0417017.D	04/17/2013 18:40
MB-MW-02-20130410 MSD	180-20360-2 MSD	N0417018.D	04/17/2013 19:08
MB-MW-03-20130410	180-20360-3	N0417019.D	04/17/2013 19:36
MB-MW-04-20130410	180-20360-4	N0417020.D	04/17/2013 20:04
MB-MW-05-20130411	180-20360-5	N0417021.D	04/17/2013 20:32
MB-MW-06-20130411	180-20360-6	N0417022.D	04/17/2013 21:00
DUP-20130410	180-20360-7	N0417023.D	04/17/2013 21:28
MB-FB-20130410	180-20360-8	N0417024.D	04/17/2013 21:56
MB-FB-20130411	180-20360-9	N0417025.D	04/17/2013 22:24

Client: ENVIRON International Corp.

Job Number: 180-20360-1

Method Blank - Batch: 180-69228

Method: 8270D
Preparation: 3520C

Lab Sample ID:	MB 180-69228/1-A	Analysis Batch:	180-69484	Instrument ID:	733
Client Matrix:	Water	Prep Batch:	180-69228	Lab File ID:	N0417013.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	04/17/2013 1211	Units:	ug/L	Final Weight/Volume:	10.0 mL
Prep Date:	04/16/2013 0804			Injection Volume:	2 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acenaphthene	ND		0.14	2.0
Acenaphthylene	ND		0.15	2.0
Anthracene	ND		0.15	2.0
Benzo[a]anthracene	ND		0.15	2.0
Benzo[a]pyrene	ND		0.13	2.0
Benzo[b]fluoranthene	ND		0.16	2.0
Benzo[g,h,i]perylene	ND		0.15	2.0
Benzo[k]fluoranthene	ND		0.55	2.0
Bis(2-ethylhexyl) phthalate	ND		13	20
2,2'-oxybis[1-chloropropane]	ND		0.20	2.0
4-Bromophenyl phenyl ether	ND		0.64	10
Butyl benzyl phthalate	ND		1.4	10
Carbazole	ND		0.16	2.0
4-Chloroaniline	ND		0.89	10
2-Chloronaphthalene	ND		0.15	2.0
4-Chlorophenyl phenyl ether	ND		0.50	10
Chrysene	ND		0.14	2.0
Dibenz(a,h)anthracene	ND		0.16	2.0
Dibenzofuran	ND		0.62	10
Di-n-butyl phthalate	ND		1.2	10
3,3'-Dichlorobenzidine	ND		1.1	10
Diethyl phthalate	ND		1.5	10
Dimethyl phthalate	ND		0.77	10
2,4-Dinitrotoluene	ND		0.54	10
2,6-Dinitrotoluene	ND		0.80	10
Di-n-octyl phthalate	ND		2.1	10
Fluoranthene	ND		0.16	2.0
Fluorene	ND		0.22	2.0
Hexachlorobenzene	ND		0.18	2.0
Hexachlorobutadiene	ND		0.17	2.0
Hexachlorocyclopentadiene	ND		0.52	10
Hexachloroethane	ND		0.63	10
Indeno[1,2,3-cd]pyrene	ND		0.20	2.0
Isophorone	ND		0.64	10
2-Methylnaphthalene	ND		0.12	2.0
Naphthalene	ND		0.14	2.0
2-Nitroaniline	ND		3.5	50
3-Nitroaniline	ND		3.2	50
4-Nitroaniline	ND		1.7	50
4-Nitrophenol	ND		6.5	50
Nitrobenzene	ND		0.84	20
N-Nitrosodi-n-propylamine	ND		0.31	2.0
N-Nitrosodiphenylamine	ND		0.85	10
Phenanthrene	ND		0.43	2.0
Pyrene	ND		0.16	2.0

Client: ENVIRON International Corp.

Job Number: 180-20360-1

Method Blank - Batch: 180-69228

Method: 8270D
Preparation: 3520C

Lab Sample ID:	MB 180-69228/1-A	Analysis Batch:	180-69484	Instrument ID:	733
Client Matrix:	Water	Prep Batch:	180-69228	Lab File ID:	N0417013.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	04/17/2013 1211	Units:	ug/L	Final Weight/Volume:	10.0 mL
Prep Date:	04/16/2013 0804			Injection Volume:	2 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
4-Chloro-3-methylphenol	ND		0.75	10
2-Chlorophenol	ND		1.7	10
2-Methylphenol	ND		0.86	10
Methylphenol, 3 & 4	ND		0.90	10
2,4-Dichlorophenol	ND		0.33	2.0
2,4-Dimethylphenol	ND		0.85	10
2,4-Dinitrophenol	ND		6.1	50
4,6-Dinitro-2-methylphenol	ND		2.2	50
2-Nitrophenol	ND		1.7	10
Pentachlorophenol	ND		0.66	10
Phenol	ND		0.58	2.0
2,4,5-Trichlorophenol	ND		1.5	10
2,4,6-Trichlorophenol	ND		1.7	10
Acetophenone	ND		0.80	10
Atrazine	ND		0.89	10
Benzaldehyde	ND		1.5	10
1,1'-Biphenyl	ND		0.42	10
Caprolactam	ND		12	50
Bis(2-chloroethoxy)methane	ND		0.58	10
Bis(2-chloroethyl)ether	ND		0.25	2.0

Surrogate	% Rec	Acceptance Limits
Nitrobenzene-d5 (Surr)	64	37 - 104
Phenol-d5 (Surr)	77	30 - 102
2-Fluorobiphenyl	63	35 - 108
2,4,6-Tribromophenol (Surr)	70	33 - 122
2-Fluorophenol (Surr)	76	26 - 100
Terphenyl-d14 (Surr)	72	25 - 130

Client: ENVIRON International Corp.

Job Number: 180-20360-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 180-69228					
LCS 180-69228/2-A	Lab Control Sample	T	Water	3520C	
MB 180-69228/1-A	Method Blank	T	Water	3520C	
180-20360-1	MB-MW-01-20130410	T	Water	3520C	
180-20360-2	MB-MW-02-20130410	T	Water	3520C	
180-20360-2MS	Matrix Spike	T	Water	3520C	
180-20360-2MSD	Matrix Spike Duplicate	T	Water	3520C	
180-20360-3	MB-MW-03-20130410	T	Water	3520C	
180-20360-4	MB-MW-04-20130410	T	Water	3520C	
180-20360-5	MB-MW-05-20130411	T	Water	3520C	
180-20360-6	MB-MW-06-20130411	T	Water	3520C	
180-20360-7	DUP-20130410	T	Water	3520C	
180-20360-8	MB-FB-20130410	T	Water	3520C	
180-20360-9	MB-FB-20130411	T	Water	3520C	
Analysis Batch:180-69484					
LCS 180-69228/2-A	Lab Control Sample	T	Water	8270D	180-69228
MB 180-69228/1-A	Method Blank	T	Water	8270D	180-69228
180-20360-1	MB-MW-01-20130410	T	Water	8270D	180-69228
180-20360-2	MB-MW-02-20130410	T	Water	8270D	180-69228
180-20360-2MS	Matrix Spike	T	Water	8270D	180-69228
180-20360-2MSD	Matrix Spike Duplicate	T	Water	8270D	180-69228
180-20360-3	MB-MW-03-20130410	T	Water	8270D	180-69228
180-20360-4	MB-MW-04-20130410	T	Water	8270D	180-69228
180-20360-5	MB-MW-05-20130411	T	Water	8270D	180-69228
180-20360-6	MB-MW-06-20130411	T	Water	8270D	180-69228
180-20360-7	DUP-20130410	T	Water	8270D	180-69228
180-20360-8	MB-FB-20130410	T	Water	8270D	180-69228
180-20360-9	MB-FB-20130411	T	Water	8270D	180-69228

Report Basis
T = Total

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab File ID: N0403DF1.D DFTPP Injection Date: 04/03/2013

Instrument ID: 733 DFTPP Injection Time: 06:11

Analysis Batch No.: 68226

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	44.6	
68	Less than 2.0 % of mass 69	0.3	(0.6)1
69	Mass 69 relative abundance	42.3	
70	Less than 2.0 % of mass 69	0.2	(0.4)1
127	40.0 - 60.0 % of mass 198	50.9	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.7	
275	10.0 - 30.0 % of mass 198	23.1	
365	Greater than 1.0 % of mass 198	2.7	
441	Present but less than mass 443	11.9	(82.1)3
442	Greater than 40.0 % of mass 198	76.4	
443	17.0 - 23.0 % of mass 442	14.4	(18.9)2

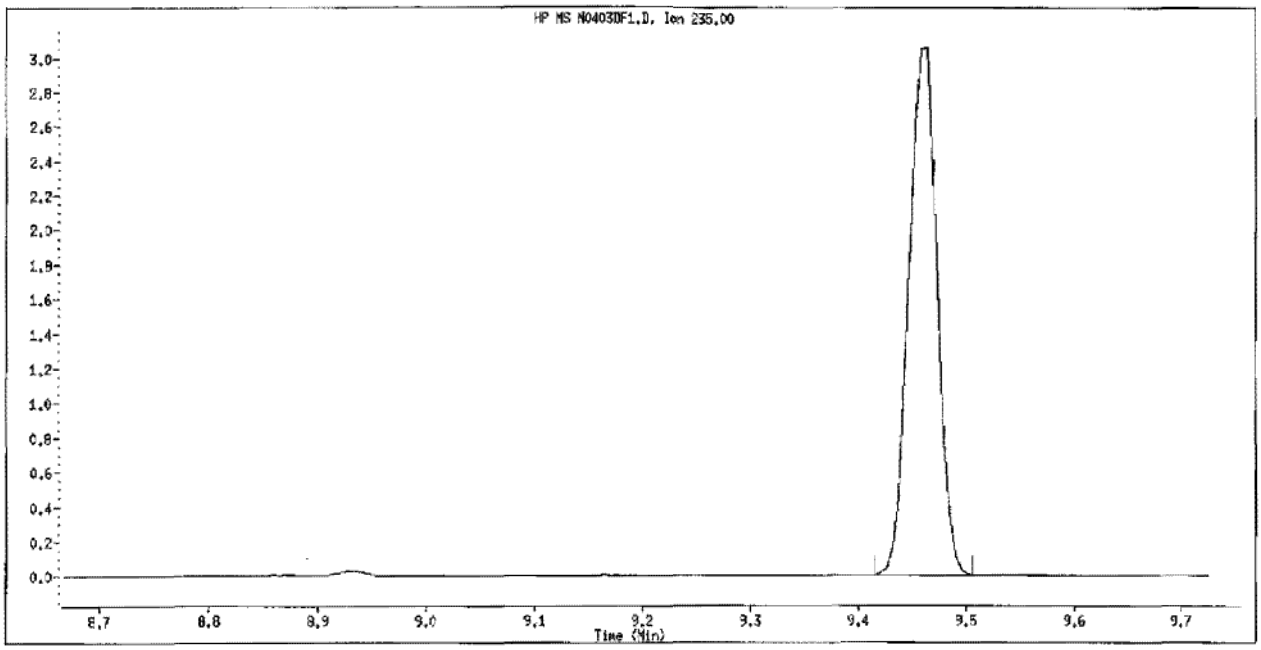
1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 180-68226/2	N0403IC1.D	04/03/2013	06:26
	IC 180-68226/3	N0403IC2.D	04/03/2013	06:54
	ICIS 180-68226/4	N0403IC3.D	04/03/2013	07:21
	IC 180-68226/5	N0403IC4.D	04/03/2013	07:48
	IC 180-68226/6	N0403IC5.D	04/03/2013	08:16
	IC 180-68226/7	N0403IC6.D	04/03/2013	08:43
	IC 180-68226/8	N0403IC7.D	04/03/2013	09:11
	IC 180-68226/9	N0403IC8.D	04/03/2013	09:38

Data File: N0403DF1.D
Inj Date: 03-APR-2013 06:11
Instrument ID: 733.i
Compound Name: 4,4'-DDT
Operator Name: 3200
Report Date: 04/04/2013

DEGRADATION REPORT



Degradation = 0.134% Good
Acceptance Criteria 0 - 20 % ✓
DDT Area = 555969
DDE Area = 748
DDD Area = 0

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68226

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/03/2013 06:26 Calibration End Date: 04/03/2013 09:38 Calibration ID: 9046

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-68226/2	N0403IC1.D
Level 2	IC 180-68226/3	N0403IC2.D
Level 3	ICIS 180-68226/4	N0403IC3.D
Level 4	IC 180-68226/5	N0403IC4.D
Level 5	IC 180-68226/6	N0403IC5.D
Level 6	IC 180-68226/7	N0403IC6.D
Level 7	IC 180-68226/8	N0403IC7.D
Level 8	IC 180-68226/9	N0403IC8.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	0.3577 0.3130	0.3355 0.3053	0.3375 0.2975	0.3177	0.3210	Ave		0.3231			0.0100	6.0		20.0			
N-Nitrosodimethylamine	0.3883 0.4205	0.4164 0.4191	0.4277 0.4111	0.4218	0.4310	Ave		0.4170			0.0100	3.1		20.0			
Pyridine	0.7980 0.7922	0.8165 0.7578	0.8522 0.7313	0.8341	0.8222	Ave		0.8005			0.0100	5.0		20.0			
Methyl methanesulfonate	0.6255 0.5211	0.5714 0.4808	0.5474 0.4558	0.5525	0.5366	Ave		0.5364			0.0100	9.8		20.0			
Benzaldehyde	0.7108 0.8159	0.6599 0.7194	1.0546 0.6018	0.9845	0.9247	Qua	0.1878	0.4985	0.1761		0.0100			20.0	0.9942		0.9900
Phenol	1.9170 1.5545	1.8097 1.4156	1.8404 1.3069	1.7333	1.6721	Ave		1.6562			0.8000	12.9		20.0			
Aniline	2.1561 1.7620	2.0103 1.5385	1.9830 1.4202	1.9908	1.9144	Ave		1.8469			0.0100	13.7		20.0			
Bis(2-chloroethyl)ether	1.3567 1.1403	1.2409 1.1004	1.2828 1.0441	1.2141	1.1976	Ave		1.1971			0.7000	8.4		20.0			
2-Chlorophenol	1.5454 1.3231	1.4375 1.2588	1.4595 1.1922	1.4026	1.3832	Ave		1.3753			0.8000	8.3		20.0			
1,3-Dichlorobenzene	1.7204 1.5555	1.6668 1.4885	1.7235 1.4167	1.6488	1.6332	Ave		1.6067			0.0100	6.9		20.0			
1,4-Dichlorobenzene	1.7892 1.5845	1.7078 1.5038	1.7500 1.4551	1.6846	1.6667	Ave		1.6427			0.0100	7.2		20.0			
Benzyl alcohol	0.9133 0.8463	0.8590 0.8122	1.0496 0.7721	0.8758	0.8696	Ave		0.8747			0.0100	9.4		20.0			
1,2-Dichlorobenzene	1.7710 1.4926	1.6356 1.4084	1.6933 1.3396	1.5987	1.5746	Ave		1.5642			0.0100	9.2		20.0			
2-Methylphenol	1.3933 1.0961	1.2661 0.9991	1.2872 0.9337	1.2167	1.1592	Ave		1.1689			0.7000	13.2		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

>0.05 <15%

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68226

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/03/2013 06:26 Calibration End Date: 04/03/2013 09:38 Calibration ID: 9046

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Indene	2.4234 1.9860	2.2851 1.8109	2.3243 1.7000	2.2395	2.1558	Ave		2.1156			0.0100	12.2		20.0			
2,2'-oxybis[1-chloropropane]	2.3569 1.6549	2.0940 1.4365	2.1789 1.2773	2.0235	1.8985	Qua	0.1018	0.3157	0.0353		0.0100			20.0	0.9992		0.9900
N-Nitrosopyrrolidine	0.6181 0.6092	0.6186 0.5982	0.6244 0.5700	0.6037	0.6198	Ave		0.6078			0.0100	2.9		20.0			
Acetophenone	2.9889 1.5568	2.0284 1.4030	1.9407 1.3258	1.8287	1.7079	Qua	-0.015	0.5062	0.0190		0.0100			20.0	0.9999		0.9900
Methylphenol, 3 & 4	1.4502 1.0815	1.3240 0.9609	1.3715 0.8785	1.2789	1.1966	Qua	0.0512	0.6194	0.0579		0.6000			20.0	0.9998		0.9900
N-Nitrosodi-n-propylamine	0.9886 0.7162	0.8963 0.6397	0.9200 0.5900	0.8496	0.8085	Qua	0.0327	0.9636	0.1228		0.5000			20.0	0.9999		0.9900
Hexachloroethane	0.6955 0.6388	0.6642 0.6101	0.6922 0.5777	0.6680	0.6624	Ave		0.6511			0.3000	6.2		20.0			
Nitrobenzene	0.3667 0.3437	0.3397 0.3288	0.3557 0.3304	0.3557	0.3452	Ave		0.3457			0.2000	3.8		20.0			
Isophorone	0.6171 0.6042	0.5821 0.5814	0.6210 0.5814	0.6041	0.6018	Ave		0.5991			0.4000	2.7		20.0			
2-Nitrophenol	0.1736 0.1961	0.1714 0.1958	0.1860 0.1981	0.1945	0.1979	Ave		0.1892			0.1000	5.8		20.0			
2,4-Dimethylphenol	0.3435 0.3261	0.2919 0.3178	0.3399 0.3172	0.3317	0.3299	Ave		0.3248			0.2000	5.0		20.0			
Benzoic acid	0.1304 0.2058	0.1591 0.2068	0.1899 0.1971	0.1988	0.1982	Ave		0.1858			0.0100	14.5		20.0			
Bis(2-chloroethoxy)methane	0.4239 0.3830	0.3809 0.3720	0.4079 0.3690	0.4001	0.3838	Ave		0.3901			0.3000	4.8		20.0			
2,4-Dichlorophenol	0.2982 0.2964	0.2815 0.2914	0.3005 0.2916	0.3015	0.2962	Ave		0.2947			0.2000	2.2		20.0			
1,2,4-Trichlorobenzene	0.3674 0.3350	0.3438 0.3250	0.3595 0.3270	0.3470	0.3439	Ave		0.3436			0.0100	4.3		20.0			
Naphthalene	1.2047 1.0736	1.0790 1.0242	1.1385 1.0082	1.1182	1.0899	Ave		1.0920			0.7000	5.8		20.0			
4-Chloroaniline	0.4748 0.4249	0.4252 0.3978	0.4340 0.3968	0.4382	0.4260	Ave		0.4272			0.0100	5.8		20.0			
2,6-Dichlorophenol	0.3456 0.3286	0.3236 0.3219	0.3441 0.3203	0.3395	0.3384	Ave		0.3328			0.0100	3.1		20.0			
Hexachlorobutadiene	0.2094 0.1966	0.1921 0.1896	0.2009 0.1917	0.2020	0.1971	Ave		0.1974			0.0100	3.3		20.0			
Caprolactam	0.0820 0.1004	0.0813 0.1006	0.0908 0.0957	0.0958	0.0970	Ave		0.0930			0.0100	8.2		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68226

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/03/2013 06:26 Calibration End Date: 04/03/2013 09:38 Calibration ID: 9046

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
4-Chloro-3-methylphenol	0.3008 0.2858	0.2675 0.2788	0.2848 0.2788	0.2820	0.2781	Ave		0.2821			0.2000	3.3		20.0			
2-Methylnaphthalene	0.7709 0.7124	0.7159 0.6864	0.7503 0.6817	0.7365	0.7299	Ave		0.7230			0.4000	4.2		20.0			
1-Methylnaphthalene	0.7538 0.6786	0.6899 0.6651	0.7185 0.6527	0.7050	0.6941	Ave		0.6947			0.0100	4.6		20.0			
Hexachlorocyclopentadiene	0.2854 0.3533	0.3077 0.3418	0.3488 0.3452	0.3459	0.3560	Ave		0.3355			0.0500	7.5		20.0			
1,2,4,5-Tetrachlorobenzene	0.6212 0.5469	0.5738 0.5380	0.6074 0.5426	0.5832	0.5723	Ave		0.5732			0.0100	5.3		20.0			
2,4,6-Trichlorophenol	0.3812 0.3742	0.3556 0.3830	0.3751 0.4014	0.3755	0.3752	Ave		0.3777			0.2000	3.3		20.0			
2,4,5-Trichlorophenol	0.4256 0.3880	0.3691 0.3703	0.4049 0.3696	0.3870	0.3911	Ave		0.3882			0.2000	5.1		20.0			
1,1'-Biphenyl	1.6680 1.5510	1.5519 1.5038	1.6645 1.4940	1.5940	1.5826	Ave		1.5762			0.0100	4.1		20.0			
2-Chloronaphthalene	1.3335 1.1634	1.1636 1.1385	1.2462 1.1461	1.2124	1.1840	Ave		1.1985			0.8000	5.4		20.0			
2-Nitroaniline	0.3044 0.3352	0.2937 0.3292	0.3289 0.3272	0.3322	0.3335	Ave		0.3230			0.0100	4.7		20.0			
Dimethyl phthalate	1.2772 1.2042	1.1540 1.1793	1.2497 1.1266	1.2121	1.2006	Ave		1.2005			0.0100	4.0		20.0			
2,6-Dinitrotoluene	0.2095 0.2861	0.2322 0.2831	0.2561 0.2753	0.2697	0.2833	Ave		0.2619			0.2000	10.6		20.0			
Acenaphthylene	1.7983 1.7624	1.7104 1.7229	1.8088 1.7125	1.7954	1.7675	Ave		1.7598			0.9000	2.3		20.0			
3-Nitroaniline	0.2852 0.3252	0.2739 0.3216	0.3034 0.3191	0.3133	0.3161	Ave		0.3072			0.0100	6.0		20.0			
Acenaphthene	1.2863 1.1378	1.1396 1.0989	1.2287 1.1047	1.1739	1.1573	Ave		1.1659			0.9000	5.5		20.0			
2,4-Dinitrophenol	0.0997 0.1578	0.0996 0.1577	0.1313 0.1631	0.1513	0.1558	Qua	0.1473	6.3415	-0.173		0.0100			20.0	0.9997		0.9900
4-Nitrophenol	0.1225 0.1449	0.1176 0.1416	0.1318 0.1432	0.1532	0.1442	Ave		0.1374			0.0100	8.9		20.0			
2,4-Dinitrotoluene	0.3087 0.3709	0.3174 0.3687	0.3466 0.3572	0.3627	0.3669	Ave		0.3499			0.2000	6.9		20.0			
Dibenzofuran	1.7726 1.6414	1.5991 1.6125	1.7026 1.6036	1.6587	1.6537	Ave		1.6555			0.8000	3.5		20.0			
2,3,5,6-Tetrachlorophenol	0.2704 0.3325	0.2809 0.3373	0.3092 0.3522	0.3057	0.3087	Ave		0.3121			0.0100	8.9		20.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68226

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/03/2013 06:26 Calibration End Date: 04/03/2013 09:38 Calibration ID: 9046

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2,3,4,6-Tetrachlorophenol	0.3018 0.3224	0.2978 0.3175	0.3141 0.3136	0.3289	0.3213	Ave		0.3147			0.0100	3.3		20.0			
2-Naphthylamine	0.9994 0.4849	0.9959 +++++	0.9843 +++++	0.8284	0.6590	Qua	0.0796	0.4296	0.6558		0.0100			20.0	0.9994		0.9900
Diethyl phthalate	1.2633 1.1902	1.1642 1.1333	1.2387 1.1049	1.2231	1.2009	Ave		1.1898			0.0100	4.5		20.0			
4-Chlorophenyl phenyl ether	0.6571 0.6321	0.6092 0.6221	0.6618 0.5882	0.6368	0.6366	Ave		0.6305			0.4000	3.8		20.0			
4-Nitroaniline	0.2864 0.3250	0.2711 0.3226	0.3083 0.3192	0.3280	0.3244	Ave		0.3106			0.0100	6.7		20.0			
Fluorene	1.3937 1.2982	1.3138 1.2717	1.3760 1.2702	1.3356	1.3215	Ave		1.3226			0.9000	3.4		20.0			
4,6-Dinitro-2-methylphenol	+++++ 0.1463	0.0956 0.1461	0.1255 0.1510	0.1395	0.1443	Ave		0.1355			0.0100	14.3		20.0			
N-Nitrosodiphenylamine	0.6734 0.6706	0.6340 0.6594	0.6817 0.6841	0.6585	0.6734	Ave		0.6669			0.0100	2.4		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	0.9105 0.8796	0.8445 0.8426	0.9213 0.8569	0.8898	0.9152	Ave		0.8825			0.0100	3.6		20.0			
4-Bromophenyl phenyl ether	0.2096 0.2349	0.2197 0.2295	0.2321 0.2282	0.2244	0.2330	Ave		0.2264			0.1000	3.7		20.0			
Hexachlorobenzene	0.2486 0.2466	0.2331 0.2387	0.2433 0.2486	0.2397	0.2448	Ave		0.2429			0.1000	2.2		20.0			
Atrazine	0.2040 0.2024	0.1784 0.1375	0.1670 +++++	0.2096	0.2113	Ave		0.1872			0.0100	14.7		20.0			
Pentachlorophenol	0.1687 0.1611	0.1352 0.1629	0.1539 0.1639	0.1525	0.1573	Ave		0.1569			0.0500	6.6		20.0			
Phenanthrene	1.3056 1.2145	1.1416 1.1895	1.2165 1.2647	1.1687	1.1814	Ave		1.2103			0.7000	4.4		20.0			
Anthracene	1.2299 1.2050	1.1208 1.1593	1.2368 1.1745	1.2133	1.2173	Ave		1.1946			0.7000	3.3		20.0			
Carbazole	1.1641 1.0923	0.9977 1.0889	1.0844 1.1079	1.0887	1.0798	Ave		1.0880			0.0100	4.2		20.0			
Di-n-butyl phthalate	1.2934 1.3484	1.1639 1.2875	1.3107 1.2719	1.3084	1.3468	Ave		1.2914			0.0100	4.5		20.0			
Fluoranthene	1.2286 1.2119	1.0990 1.1854	1.1824 1.2014	1.1789	1.1911	Ave		1.1848			0.6000	3.2		20.0			
Benzidine	+++++ 0.4054	0.3312 0.3517	0.4679 0.3554	0.4479	0.4277	Ave		0.3982			0.0100	13.3		20.0			
Pyrene	1.4836 1.3564	1.4007 1.3388	1.4670 1.3634	1.3657	1.3938	Ave		1.3962			0.6000	3.8		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68226

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/03/2013 06:26 Calibration End Date: 04/03/2013 09:38 Calibration ID: 9046

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Butyl benzyl phthalate	+++++ 0.6319	0.5840 0.6212	0.6167 0.6230	0.6101	0.6252	Ave		0.6160			0.0100	2.5		20.0			
3,3'-Dichlorobenzidine	0.4480 0.4638	0.3804 0.4727	0.4192 0.4784	0.4372	0.4505	Ave		0.4438			0.0100	7.2		20.0			
Bis(2-ethylhexyl) phthalate	1.1115 0.8971	0.8209 0.8885	0.8558 0.8898	0.8548	0.8759	Ave		0.8993			0.0100	9.9		20.0			
Benzo[a]anthracene	1.3501 1.2494	1.1867 1.2712	1.2735 1.3015	1.2169	1.2334	Ave		1.2603			0.8000	4.0		20.0			
Chrysene	1.2933 1.2046	1.1442 1.2195	1.2320 1.2013	1.1723	1.1937	Ave		1.2076			0.7000	3.6		20.0			
Di-n-octyl phthalate	1.9706 1.4770	1.5033 1.4511	1.4396 1.4853	1.3519	1.4141	Ave		1.5116			0.0100	12.7		20.0			
7,12-Dimethylbenz(a)anthracene	0.5977 0.5900	0.5210 0.5883	0.5773 0.5937	0.5502	0.5709	Ave		0.5736			0.0100	4.6		20.0			
Benzo[b]fluoranthene	1.4676 1.2922	1.2171 1.3630	1.3310 1.3524	1.2084	1.2603	Ave		1.3115			0.7000	6.5		20.0			
Benzo[k]fluoranthene	1.2965 1.2441	1.1519 1.2156	1.2428 1.2612	1.2412	1.2344	Ave		1.2360			0.7000	3.3		20.0			
Benzo[a]pyrene	1.2155 1.0674	1.0198 1.0927	1.0673 1.1116	1.0402	1.0543	Ave		1.0836			0.7000	5.6		20.0			
Indeno[1,2,3-cd]pyrene	1.6051 1.3681	1.3030 1.4212	1.3913 1.4123	1.3764	1.3832	Ave		1.4076			0.5000	6.2		20.0			
Dibenz(a,h)anthracene	1.3812 1.1619	1.1282 1.2159	1.1734 1.1997	1.1717	1.1616	Ave		1.1992			0.4000	6.5		20.0			
Benzo[g,h,i]perylene	1.3441 1.1647	1.1537 1.1930	1.1927 1.1922	1.1891	1.1700	Ave		1.1999			0.5000	5.0		20.0			
2-Fluorophenol (Surr)	1.0736 1.0448	1.0781 1.0182	1.1032 0.9623	1.0820	1.0887	Ave		1.0564				4.4		20.0			
Phenol-d5 (Surr)	1.6094 1.3965	1.5412 1.3184	1.5687 1.2330	1.4967	1.4537	Ave		1.4522				8.9		20.0			
Nitrobenzene-d5 (Surr)	0.3788 0.3652	0.3554 0.3505	0.3730 0.3510	0.3713	0.3664	Ave		0.3640				2.9		20.0			
2-Fluorobiphenyl	1.4996 1.4044	1.3632 1.3742	1.4678 1.3769	1.4348	1.4154	Ave		1.4170				3.4		20.0			
2,4,6-Tribromophenol (Surr)	0.0985 0.1071	0.0890 0.1061	0.1016 0.1055	0.0975	0.1051	Ave		0.1013			0.0100	6.0		20.0			
Terphenyl-d14 (Surr)	0.9929 0.9203	0.9178 0.9039	0.9641 0.9031	0.9127	0.9303	Ave		0.9306				3.4		20.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68226

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/03/2013 06:26 Calibration End Date: 04/03/2013 09:38 Calibration ID: 9046

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-68226/2	N0403IC1.D
Level 2	IC 180-68226/3	N0403IC2.D
Level 3	ICIS 180-68226/4	N0403IC3.D
Level 4	IC 180-68226/5	N0403IC4.D
Level 5	IC 180-68226/6	N0403IC5.D
Level 6	IC 180-68226/7	N0403IC6.D
Level 7	IC 180-68226/8	N0403IC7.D
Level 8	IC 180-68226/9	N0403IC8.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dioxane	DCB	Ave	3687 319306	16647 489968	29574 581777	66956	159419	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosodimethylamine	DCB	Ave	4002 428943	20660 672618	37477 803843	88898	214038	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pyridine	DCB	Ave	8225 808078	40512 1216187	74681 1429949	175798	408344	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Methyl methanesulfonate	DCB	Ave	6447 531506	28351 771670	47969 891361	116460	266493	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzaldehyde	DCB	Qua	7326 832223	32742 1154531	92416 1176856	207510	459274	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenol	DCB	Ave	19758 1585721	89795 2271921	161280 2555636	365337	830457	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Aniline	DCB	Ave	22222 1797359	99749 2469292	173779 2777145	419606	950792	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-chloroethyl)ether	DCB	Ave	13983 1163194	61571 1766103	112419 2041788	255894	594771	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Chlorophenol	DCB	Ave	15928 1349636	71326 2020272	127905 2331333	295623	686968	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	17732 1586734	82701 2389032	151042 2770337	347536	811151	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	18441 1616324	84736 2413480	153359 2845406	355064	827776	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzyl alcohol	DCB	Ave	9413 863300	42621 1303596	91982 1509763	184603	431909	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	18253 1522544	81157 2260357	148393 2619542	336961	782013	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Methylphenol	DCB	Ave	14360 1118058	62820 1603437	112806 1825873	256452	575729	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Indene	DCB	Ave	24977 2025847	113380 2906474	203690 3324234	472037	1070684	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68226

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/03/2013 06:26 Calibration End Date: 04/03/2013 09:38 Calibration ID: 9046

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
2,2'-oxybis[1-chloropropane]	DCB	Qua	24292 1688073	103900 2305564	190946 2497639	426508	942872	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosopyrrolidine	DCB	Ave	6371 621407	30695 960163	54719 1114694	127247	307842	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acetophenone	DCB	Qua	30806 1587986	100644 2251695	170070 2592548	385444	848234	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Methylphenol, 3 & 4	DCB	Qua	14947 1103196	65692 1542219	120194 1717783	269559	594283	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosodi-n-propylamine	DCB	Qua	10189 730570	44474 1026758	80625 1153630	179076	401558	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachloroethane	DCB	Ave	7168 651608	32958 979136	60662 1129579	140789	328980	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Nitrobenzene	NPT	Ave	15299 1348981	70769 2015298	126582 2358092	292113	671604	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Isophorone	NPT	Ave	25743 2371450	121280 3562895	220993 4152019	496062	1170616	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Nitrophenol	NPT	Ave	7241 769439	35707 1200147	66196 1414704	159715	385064	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dimethylphenol	NPT	Ave	14331 1279877	60807 1947714	120944 2265423	272400	641794	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzoic acid	NPT	Ave	27207 807603	66305 1267542	168974 1407310	326558	578479	2.00 40.0	4.00 60.0	10.0 80.0	20.0	30.0
Bis(2-chloroethoxy)methane	NPT	Ave	17683 1503050	79365 2279770	145152 2635616	328534	746594	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dichlorophenol	NPT	Ave	12440 1163156	58654 1785680	106949 2082528	247608	576124	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2,4-Trichlorobenzene	NPT	Ave	15327 1314823	71623 1991925	127929 2334980	284991	668913	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Naphthalene	NPT	Ave	50257 4213491	224804 6276644	405152 7200448	918274	2120311	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chloroaniline	NPT	Ave	19806 1667666	88580 2437708	154442 2833898	359854	828799	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,6-Dichlorophenol	NPT	Ave	14418 1289723	67420 1973016	122458 2287758	278796	658369	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorobutadiene	NPT	Ave	8734 771782	40024 1162235	71491 1368995	165874	383336	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Caprolactam	NPT	Ave	3422 394195	16945 616717	32299 683542	78675	188694	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chloro-3-methylphenol	NPT	Ave	12551 1121515	55724 1708330	101354 1991147	231537	541048	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Methylnaphthalene	NPT	Ave	32162 2796078	149156 4206709	267014 4868319	604775	1419932	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68226

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/03/2013 06:26 Calibration End Date: 04/03/2013 09:38 Calibration ID: 9046

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1-Methylnaphthalene	NPT	Ave	31449 2663233	143739 4075824	255678 4661108	578911	1350235	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorocyclopentadiene	ANT	Ave	6782 804122	37035 1206060	70592 1413901	162968	394037	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2,4,5-Tetrachlorobenzene	ANT	Ave	14762 1244847	69062 1898382	122916 2222569	274765	633404	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,6-Trichlorophenol	ANT	Ave	9060 851868	42802 1351515	75910 1644290	176887	415246	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,5-Trichlorophenol	ANT	Ave	10113 883145	44419 1306749	81939 1513962	182306	432840	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,1'-Biphenyl	ANT	Ave	39640 3530573	186779 5306296	336850 6119693	750958	1751677	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Chloronaphthalene	ANT	Ave	31690 2648343	140038 4017589	252202 4694744	571199	1310562	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Nitroaniline	ANT	Ave	7235 762915	35351 1161537	66567 1340487	156489	369161	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dimethyl phthalate	ANT	Ave	30352 2741105	138888 4161273	252903 4614699	571069	1328841	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,6-Dinitrotoluene	ANT	Ave	4979 651317	27949 998805	51828 1127754	127041	313611	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acenaphthylene	ANT	Ave	42735 4011722	205850 6079728	366042 7014986	845857	1956384	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
3-Nitroaniline	ANT	Ave	6777 740276	32959 1134689	61395 1307136	147598	349871	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acenaphthene	ANT	Ave	30568 2589904	137157 3877807	248646 4525289	553052	1280938	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dinitrophenol	ANT	Qua	11845 359315	23968 556442	66417 668268	142581	258735	2.00 40.0	4.00 60.0	10.0 80.0	20.0	30.0
4-Nitrophenol	ANT	Ave	14552 329783	28304 499608	66686 586598	144330	239350	2.00 40.0	4.00 60.0	10.0 80.0	20.0	30.0
2,4-Dinitrotoluene	ANT	Ave	7335 844288	38197 1300922	70151 1463287	170868	406064	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dibenzofuran	ANT	Ave	42125 3736365	192452 5690020	344552 6568820	781459	1830361	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,3,5,6-Tetrachlorophenol	ANT	Ave	6425 756937	33806 1190324	62573 1442874	144005	341719	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,3,4,6-Tetrachlorophenol	ANT	Ave	7171 733962	35839 1120343	63575 1284652	154937	355625	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Naphthylamine	ANT	Qua	23751 1103736	119857 +++++	199201 +++++	390287	729398	0.400 40.0	2.00 +++++	4.00 +++++	10.0	20.0
Diethyl phthalate	ANT	Ave	30022 2709330	140112 3999028	250670 4525791	576244	1329186	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68226

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/03/2013 06:26 Calibration End Date: 04/03/2013 09:38 Calibration ID: 9046

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
4-Chlorophenyl phenyl ether	ANT	Ave	15615 1438808	73317 2195266	133922 2409568	300010	704579	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Nitroaniline	ANT	Ave	6806 739846	32622 1138269	62382 1307589	154528	359101	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Fluorene	ANT	Ave	33120 2955140	158119 4487446	278461 5203096	629252	1462744	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4,6-Dinitro-2-methylphenol	PHN	Ave	+++++ 505169	35547 792856	96680 913039	204683	362865	+++++ 40.0	4.00 60.0	10.0 80.0	20.0	30.0
N-Nitrosodiphenylamine	PHN	Ave	24860 2315470	117922 3577802	210044 4137568	482936	1129128	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2-Diphenylhydrazine(as Azobenzene)	PHN	Ave	33615 3037054	157079 4571756	283848 5182744	652634	1534423	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Bromophenyl phenyl ether	PHN	Ave	7738 811204	40873 1245249	71519 1380451	164612	390652	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorobenzene	PHN	Ave	9176 851400	43357 1295107	74954 1503686	175804	410484	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Atrazine	PHN	Ave	7533 698853	33182 746187	51445 +++++	153756	354258	0.400 40.0	2.00 60.0	4.00 +++++	10.0	20.0
Pentachlorophenol	PHN	Ave	31135 556062	50291 883867	118564 991293	223632	395593	2.00 40.0	4.00 60.0	10.0 80.0	20.0	30.0
Phenanthrene	PHN	Ave	48201 4193124	212350 6454225	374832 7649490	857190	1980834	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Anthracene	PHN	Ave	45405 4160626	208480 6290547	381081 7103586	889858	2041114	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Carbazole	PHN	Ave	42975 3771415	185575 5908560	334129 6700930	798459	1810456	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Di-n-butyl phthalate	PHN	Ave	47751 4655451	216485 6985924	403834 7693040	959590	2258108	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Fluoranthene	PHN	Ave	45358 4184390	204421 6431661	364306 7266215	864680	1997172	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzidine	CRY	Ave	+++++ 1269716	48166 1718173	116551 1977315	286853	618473	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pyrene	CRY	Ave	45369 4248000	203711 6539998	365436 7586494	874622	2015269	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Butyl benzyl phthalate	CRY	Ave	+++++ 1979062	84936 3034529	153629 3466522	390680	904029	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
3,3'-Dichlorobenzidine	CRY	Ave	13700 1452663	55318 2309265	104427 2661949	279969	651433	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-ethylhexyl) phthalate	CRY	Ave	33992 2809579	119389 4340131	213180 4950943	547431	1266504	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[a]anthracene	CRY	Ave	41286 3912896	172584 6209675	317223 7242144	779299	1783414	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68226

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/03/2013 06:26 Calibration End Date: 04/03/2013 09:38 Calibration ID: 9046

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chrysene	CRY	Ave	39550 3772689	166404 5957334	306891 6684113	750761	1726046	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Di-n-octyl phthalate	PRY	Ave	57130 4583609	205841 7197049	343149 8212031	862957	2028015	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
7,12-Dimethylbenz(a)anthracene	PRY	Ave	17329 1831117	71336 2917577	137607 3282468	351211	818757	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[b]fluoranthene	PRY	Ave	42546 4010065	166648 6759999	317265 7476977	771360	1807391	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[k]fluoranthene	PRY	Ave	37587 3861013	157718 6029001	296240 6973026	792345	1770267	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[a]pyrene	PRY	Ave	35238 3312523	139641 5419330	254404 6145594	664005	1511945	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Indeno[1,2,3-cd]pyrene	PRY	Ave	46532 4245830	178419 7048563	331645 7808482	878604	1983631	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dibenz(a,h)anthracene	PRY	Ave	40043 3605891	154473 6030333	279711 6632707	747975	1665913	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[g,h,i]perylene	PRY	Ave	38967 3614394	157964 5916832	284306 6591228	759082	1677882	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Fluorophenol (Surr)	DCB	Ave	11065 1065789	53494 1634244	96674 1881824	228067	540713	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenol-d5 (Surr)	DCB	Ave	16588 1424463	76472 2115924	137469 2411031	315472	721970	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Nitrobenzene-d5 (Surr)	NPT	Ave	15805 1433245	74051 2148108	132742 2506636	304899	712777	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Fluorobiphenyl	ANT	Ave	35636 3196870	164069 4849023	297036 5639959	675964	1566677	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,6-Tribromophenol (Surr)	PHN	Ave	3637 369890	16558 575837	31298 638191	71493	176170	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Terphenyl-d14 (Surr)	CRY	Ave	30364 2882090	133476 4415483	240152 5024983	584526	1345153	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0

Curve Type Legend:
Ave = Average ISTD
Qua = Quadratic ISTD

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: ICV 180-68226/10 Calibration Date: 04/03/2013 10:06

Instrument ID: 733 Calib Start Date: 04/03/2013 06:26

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 04/03/2013 09:38

Lab File ID: N0403SV1.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.3231	0.3221	0.0100	9.97	10.0	-0.3	30.0
N-Nitrosodimethylamine	Ave	0.4170	0.4106	0.0100	9.85	10.0	-1.5	30.0
Pyridine	Ave	0.8005	0.8186	0.0100	10.2	10.0	2.3	30.0
Methyl methanesulfonate	Ave	0.5364	0.5211	0.0100	9.71	10.0	-2.9	30.0
Benzaldehyde	Qua	0.8089	0.9078	0.0100	8.90	10.0	-11.0	30.0
Phenol	Ave	1.656	1.611	0.8000	9.73	10.0	-2.7	30.0
Aniline	Ave	1.847	1.888	0.0100	10.2	10.0	2.3	30.0
Bis(2-chloroethyl)ether	Ave	1.197	1.133	0.7000	9.47	10.0	-5.3	30.0
2-Chlorophenol	Ave	1.375	1.344	0.8000	9.77	10.0	-2.3	30.0
1,3-Dichlorobenzene	Ave	1.607	1.570	0.0100	9.77	10.0	-2.3	30.0
1,4-Dichlorobenzene	Ave	1.643	1.586	0.0100	9.65	10.0	-3.5	30.0
Benzyl alcohol	Ave	0.8747	0.8221	0.0100	9.40	10.0	-6.0	30.0
1,2-Dichlorobenzene	Ave	1.564	1.503	0.0100	9.61	10.0	-3.9	30.0
2-Methylphenol	Ave	1.169	1.134	0.7000	9.70	10.0	-3.0	30.0
Indene	Ave	2.116	2.168	0.0100	10.2	10.0	2.5	30.0
2,2'-oxybis[1-chloropropane]	Qua	1.865	1.732	0.0100	8.52	10.0	-14.8	30.0
N-Nitrosopyrrolidine	Ave	0.6078	0.5563	0.0100	9.15	10.0	-8.5	30.0
Acetophenone	Qua	1.848	1.663	0.0100	9.67	10.0	-3.3	30.0
Methylphenol, 3 & 4	Qua	1.193	1.162	0.6000	9.36	10.0	-6.4	30.0
N-Nitrosodi-n-propylamine	Qua	0.8011	0.7628	0.5000	9.27	10.0	-7.3	30.0
Hexachloroethane	Ave	0.6511	0.6329	0.3000	9.72	10.0	-2.8	30.0
Nitrobenzene	Ave	0.3457	0.3385 ✓	0.2000	9.79	10.0	-2.1 ✓	30.0
Isophorone	Ave	0.5991	0.5908	0.4000	9.86	10.0	-1.4	30.0
2-Nitrophenol	Ave	0.1892	0.1896	0.1000	10.0	10.0	0.2	30.0
2,4-Dimethylphenol	Ave	0.3248	0.3138	0.2000	9.66	10.0	-3.4	30.0
Benzoic acid	Ave	0.1858	0.1842	0.0100	9.91	10.0	-0.9	30.0
Bis(2-chloroethoxy)methane	Ave	0.3901	0.3746	0.3000	9.60	10.0	-4.0	30.0
2,4-Dichlorophenol	Ave	0.2947	0.2916	0.2000	9.90	10.0	-1.0	30.0
1,2,4-Trichlorobenzene	Ave	0.3436	0.3335	0.0100	9.71	10.0	-2.9	30.0
Naphthalene	Ave	1.092	1.029	0.7000	9.42	10.0	-5.8	30.0
4-Chloroaniline	Ave	0.4272	0.4166	0.0100	9.75	10.0	-2.5	30.0
2,6-Dichlorophenol	Ave	0.3328	0.3300	0.0100	9.92	10.0	-0.8	30.0
Hexachlorobutadiene	Ave	0.1974	0.1857	0.0100	9.40	10.0	-6.0	30.0
Caprolactam	Ave	0.0930	0.0956	0.0100		10.0	2.8	30.0
4-Chloro-3-methylphenol	Ave	0.2821	0.2723	0.2000	9.65	10.0	-3.5	30.0
2-Methylnaphthalene	Ave	0.7230	0.6916	0.4000	9.56	10.0	-4.4	30.0
1-Methylnaphthalene	Ave	0.6947	0.6941	0.0100	9.99	10.0	-0.0	30.0
Hexachlorocyclopentadiene	Ave	0.3355	0.3169	0.0500	9.45	10.0	-5.5	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5732	0.5550	0.0100	9.68	10.0	-3.2	30.0
2,4,6-Trichlorophenol	Ave	0.3777	0.3596	0.2000	9.52	10.0	-4.8	30.0
2,4,5-Trichlorophenol	Ave	0.3882	0.3769	0.2000	9.71	10.0	-2.9	30.0

>0.050 ✓

✓ <20%.

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: ICV 180-68226/10 Calibration Date: 04/03/2013 10:06

Instrument ID: 733 Calib Start Date: 04/03/2013 06:26

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 04/03/2013 09:38

Lab File ID: N0403SV1.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1'-Biphenyl	Ave	1.576	1.557	0.0100	9.88	10.0	-1.2	30.0
2-Chloronaphthalene	Ave	1.198	1.149	0.8000	9.59	10.0	-4.1	30.0
2-Nitroaniline	Ave	0.3230	0.3124	0.0100	9.67	10.0	-3.3	30.0
Dimethyl phthalate	Ave	1.200	1.150	0.0100	9.58	10.0	-4.2	30.0
2,6-Dinitrotoluene	Ave	0.2619	0.2709	0.2000	10.3	10.0	3.4	30.0
Acenaphthylene	Ave	1.760	1.617	0.9000	9.19	10.0	-8.1	30.0
3-Nitroaniline	Ave	0.3072	0.3125	0.0100	10.2	10.0	1.7	30.0
2,4-Dinitrophenol	Qua	0.1395	0.1348	0.0100	9.06	10.0	-9.4	30.0
Acenaphthene	Ave	1.166	1.058	0.9000	9.07	10.0	-9.3	30.0
4-Nitrophenol	Ave	0.1374	0.1323	0.0100	9.63	10.0	-3.7	30.0
2,4-Dinitrotoluene	Ave	0.3499	0.3469	0.2000	9.91	10.0	-0.9	30.0
Dibenzofuran	Ave	1.656	1.591	0.8000	9.61	10.0	-3.9	30.0
2,3,5,6-Tetrachlorophenol	Ave	0.3121	0.2988	0.0100	9.57	10.0	-4.3	30.0
2,3,4,6-Tetrachlorophenol	Ave	0.3147	0.3053	0.0100	9.70	10.0	-3.0	30.0
Diethyl phthalate	Ave	1.190	1.163	0.0100	9.77	10.0	-2.3	30.0
4-Chlorophenyl phenyl ether	Ave	0.6305	0.6000	0.4000	9.52	10.0	-4.8	30.0
4-Nitroaniline	Ave	0.3106	0.3136	0.0100	10.1	10.0	1.0	30.0
Fluorene	Ave	1.323	1.229	0.9000	9.29	10.0	-7.1	30.0
4,6-Dinitro-2-methylphenol	Ave	0.1355	0.1295	0.0100	9.56	10.0	-4.4	30.0
N-Nitrosodiphenylamine	Ave	0.6669	0.5708	0.0100	8.56	10.0	-14.4	30.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.8825	0.8436	0.0100	9.56	10.0	-4.4	30.0
4-Bromophenyl phenyl ether	Ave	0.2264	0.2226	0.1000	9.83	10.0	-1.7	30.0
Hexachlorobenzene	Ave	0.2429	0.2347	0.1000	9.66	10.0	-3.4	30.0
Atrazine	Ave	0.1872	0.2119	0.0100	11.3	10.0	13.2	30.0
Pentachlorophenol	Ave	0.1569	0.1450	0.0500	9.24	10.0	-7.6	30.0
Phenanthrene	Ave	1.210	1.055	0.7000	8.71	10.0	-12.9	30.0
Anthracene	Ave	1.195	1.144	0.7000	9.57	10.0	-4.3	30.0
Carbazole	Ave	1.088	1.074	0.0100	9.87	10.0	-1.3	30.0
Di-n-butyl phthalate	Ave	1.291	1.293	0.0100	10.0	10.0	0.2	30.0
Fluoranthene	Ave	1.185	1.076	0.6000	9.08	10.0	-9.2	30.0
Benzidine	Ave	0.3982	0.4864	0.0100		10.0	22.2	30.0
Pyrene	Ave	1.396	1.308	0.6000	9.37	10.0	-6.3	30.0
Butyl benzyl phthalate	Ave	0.6160	0.6220	0.0100	10.1	10.0	1.0	30.0
3,3'-Dichlorobenzidine	Ave	0.4438	0.4277	0.0100	9.64	10.0	-3.6	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.8993	0.8384	0.0100		10.0	-6.8	30.0
Benzo[a]anthracene	Ave	1.260	1.169	0.8000	9.27	10.0	-7.3	30.0
Chrysene	Ave	1.208	1.114	0.7000	9.22	10.0	-7.8	30.0
Di-n-octyl phthalate	Ave	1.512	1.440	0.0100	9.53	10.0	-4.7	30.0
7,12-Dimethylbenz(a)anthracene	Ave	0.5736	0.5567	0.0100	9.70	10.0	-3.0	30.0
Benzo[b]fluoranthene	Ave	1.311	1.166	0.7000	8.89	10.0	-11.1	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: ICV 180-68226/10 Calibration Date: 04/03/2013 10:06

Instrument ID: 733 Calib Start Date: 04/03/2013 06:26

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 04/03/2013 09:38

Lab File ID: N0403SV1.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[k]fluoranthene	Ave	1.236	1.177	0.7000	9.52	10.0	-4.8	30.0
Benzo[a]pyrene	Ave	1.084	1.074	0.7000	9.91	10.0	-0.9	30.0
Indeno[1,2,3-cd]pyrene	Ave	1.408	1.320	0.5000	9.38	10.0	-6.2	30.0
Dibenz(a,h)anthracene	Ave	1.199	1.105	0.4000	9.21	10.0	-7.9	30.0
Benzo[g,h,i]perylene	Ave	1.200	1.103	0.5000	9.19	10.0	-8.1	30.0
2-Fluorophenol (Surr)	Ave	1.056	1.041		9.85	10.0	-1.5	30.0
Phenol-d5 (Surr)	Ave	1.452	1.405		9.68	10.0	-3.2	30.0
2-Chlorophenol-d4	Ave	1.354	1.302		9.61	10.0	-3.9	
1,2-Dichlorobenzene-d4	Ave	1.033	1.002		9.70	10.0	-3.0	
Nitrobenzene-d5 (Surr)	Ave	0.3640	0.3537		9.72	10.0	-2.8	30.0
2-Fluorobiphenyl	Ave	1.417	1.359		9.59	10.0	-4.1	30.0
2,4,6-Tribromophenol (Surr)	Ave	0.1013	0.0989	0.0100	9.76	10.0	-2.4	30.0
Terphenyl-d14 (Surr)	Ave	0.9306	0.8883		9.55	10.0	-4.5	30.0

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Instrument ID: 733 Start Date: 04/03/2013 06:11

Analysis Batch Number: 68226 End Date: 04/03/2013 10:42

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-68226/1		04/03/2013 06:11	1	N0403DF1.D	Rxi-5Sil MS 0.32(mm)
IC 180-68226/2		04/03/2013 06:26	1	N0403IC1.D	Rxi-5Sil MS 0.32(mm)
IC 180-68226/3		04/03/2013 06:54	1	N0403IC2.D	Rxi-5Sil MS 0.32(mm)
ICIS 180-68226/4		04/03/2013 07:21	1	N0403IC3.D	Rxi-5Sil MS 0.32(mm)
IC 180-68226/5		04/03/2013 07:48	1	N0403IC4.D	Rxi-5Sil MS 0.32(mm)
IC 180-68226/6		04/03/2013 08:16	1	N0403IC5.D	Rxi-5Sil MS 0.32(mm)
IC 180-68226/7		04/03/2013 08:43	1	N0403IC6.D	Rxi-5Sil MS 0.32(mm)
IC 180-68226/8		04/03/2013 09:11	1	N0403IC7.D	Rxi-5Sil MS 0.32(mm)
IC 180-68226/9		04/03/2013 09:38	1	N0403IC8.D	Rxi-5Sil MS 0.32(mm)
ICV 180-68226/10		04/03/2013 10:06	1		Rxi-5Sil MS 0.32(mm)
ICV 180-68226/11		04/03/2013 10:42	1		Rxi-5Sil MS 0.32(mm)

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab File ID: N0417DF1.D DFTPP Injection Date: 04/17/2013

Instrument ID: 733 DFTPP Injection Time: 10:29

Analysis Batch No.: 69484

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	42.7	
68	Less than 2.0 % of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	43.5	
70	Less than 2.0 % of mass 69	0.2	(0.4)1
127	40.0 - 60.0 % of mass 198	50.6	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.5	
275	10.0 - 30.0 % of mass 198	24.0	
365	Greater than 1.0 % of mass 198	2.5	
441	Present but less than mass 443	13.0	(80.7)3
442	Greater than 40.0 % of mass 198	82.6	
443	17.0 - 23.0 % of mass 442	16.1	(19.5)2

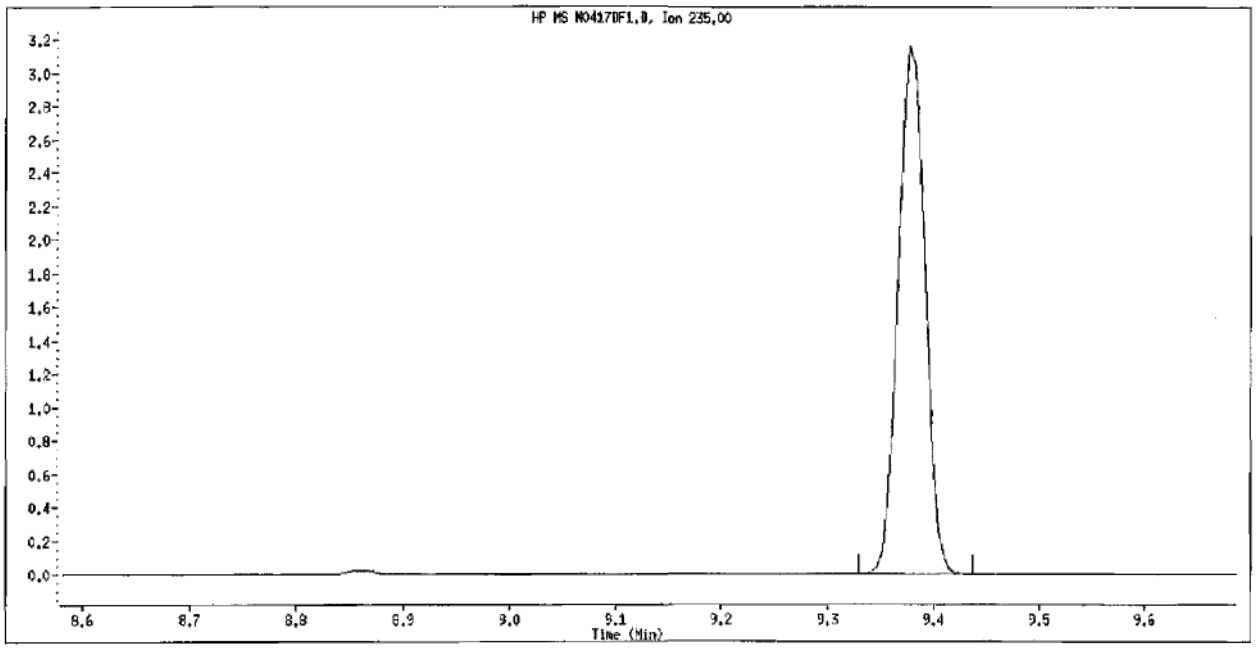
1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-69484/14	N04170CC.D	04/17/2013	10:46
	MB 180-69228/1-A	N0417013.D	04/17/2013	12:11
	LCS 180-69228/2-A	N0417014.D	04/17/2013	14:29
MB-MW-01-20130410	180-20360-1	N0417015.D	04/17/2013	17:44
MB-MW-02-20130410	180-20360-2	N0417016.D	04/17/2013	18:12
MB-MW-02-20130410 MS	180-20360-2 MS	N0417017.D	04/17/2013	18:40
MB-MW-02-20130410 MSD	180-20360-2 MSD	N0417018.D	04/17/2013	19:08
MB-MW-03-20130410	180-20360-3	N0417019.D	04/17/2013	19:36
MB-MW-04-20130410	180-20360-4	N0417020.D	04/17/2013	20:04
MB-MW-05-20130411	180-20360-5	N0417021.D	04/17/2013	20:32
MB-MW-06-20130411	180-20360-6	N0417022.D	04/17/2013	21:00
DUP-20130410	180-20360-7	N0417023.D	04/17/2013	21:28
MB-FB-20130410	180-20360-8	N0417024.D	04/17/2013	21:56
MB-FB-20130411	180-20360-9	N0417025.D	04/17/2013	22:24

Data File: N0417DF1.D
Inj Date: 17-APR-2013 10:29
Instrument ID: 733.i
Compound Name: 4,4'-DDT
Operator Name: 3200
Report Date: 04/18/2013

DEGRADATION REPORT



Degradation = 0.0926% Good
Acceptance Criteria 0 - 20 % ✓
DDT Area = 557882
DDE Area = 517
DDD Area = 0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: CCVIS 180-69484/14 Calibration Date: 04/17/2013 10:46

Instrument ID: 733 Calib Start Date: 04/03/2013 06:26

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 04/03/2013 09:38

Lab File ID: N04170CC.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.3231	0.3860	0.0100	2.39	2.00	19.4	20.0
N-Nitrosodimethylamine	Ave	0.4170	0.4846	0.0100	2.32	2.00	16.2	20.0
Pyridine	Ave	0.8005	0.9029	0.0100	2.26	2.00	12.8	20.0
Methyl methanesulfonate	Ave	0.5364	0.5835	0.0100	2.18	2.00	8.8	20.0
Benzaldehyde	Qua	0.8089	1.094	0.0100	2.05	2.00	2.6	20.0
Phenol	Ave	1.656	1.767	0.8000	2.13	2.00	6.7	20.0
Aniline	Ave	1.847	1.904	0.0100	2.06	2.00	3.1	20.0
Bis(2-chloroethyl)ether	Ave	1.197	1.295	0.7000	2.16	2.00	8.1	20.0
2-Chlorophenol	Ave	1.375	1.480	0.8000	2.15	2.00	7.6	20.0
1,3-Dichlorobenzene	Ave	1.607	1.719	0.0100	2.14	2.00	7.0	20.0
1,4-Dichlorobenzene	Ave	1.643	1.753	0.0100	2.13	2.00	6.7	20.0
Benzyl alcohol	Ave	0.8747	0.9206	0.0100	2.10	2.00	5.2	20.0
1,2-Dichlorobenzene	Ave	1.564	1.684	0.0100	2.15	2.00	7.7	20.0
2-Methylphenol	Ave	1.169	1.235	0.7000	2.11	2.00	5.7	20.0
Indene	Ave	2.116	2.300	0.0100	2.17	2.00	8.7	20.0
2,2'-oxybis(1-chloropropane)	Qua	1.865	2.060	0.0100	1.86	2.00	-7.1	20.0
N-Nitrosopyrrolidine	Ave	0.6078	0.6194	0.0100	2.04	2.00	1.9	20.0
Acetophenone	Qua	1.848	1.951	0.0100	1.99	2.00	-0.7	20.0
Methylphenol, 3 & 4	Qua	1.193	1.273	0.6000	1.88	2.00	-6.2	20.0
N-Nitrosodi-n-propylamine	Qua	0.8011	0.9114	0.5000	1.99	2.00	-0.5	20.0
Hexachloroethane	Ave	0.6511	0.6635	0.3000	2.04	2.00	1.9	20.0
Nitrobenzene	Ave	0.3457	0.3557	0.2000	2.06	2.00	2.9	20.0
Isophorone	Ave	0.5991	0.5893	0.4000	1.97	2.00	-1.6	20.0
2-Nitrophenol	Ave	0.1892	0.1900	0.1000	2.01	2.00	0.4	20.0
2,4-Dimethylphenol	Ave	0.3248	0.3378	0.2000	2.08	2.00	4.0	20.0
Benzoic acid	Ave	0.1858	0.1786	0.0100		5.00	-3.9	20.0
Bis(2-chloroethoxy)methane	Ave	0.3901	0.3979	0.3000	2.04	2.00	2.0	20.0
2,4-Dichlorophenol	Ave	0.2947	0.2972	0.2000	2.02	2.00	0.8	20.0
1,2,4-Trichlorobenzene	Ave	0.3436	0.3641	0.0100	2.12	2.00	6.0	20.0
Naphthalene	Ave	1.092	1.140	0.7000	2.09	2.00	4.4	20.0
4-Chloroaniline	Ave	0.4272	0.4315	0.0100	2.02	2.00	1.0	20.0
2,6-Dichlorophenol	Ave	0.3328	0.3445	0.0100	2.07	2.00	3.5	20.0
Hexachlorobutadiene	Ave	0.1974	0.2119	0.0100	2.15	2.00	7.3	20.0
Caprolactam	Ave	0.0930	0.0823	0.0100		2.00	-11.5	20.0
4-Chloro-3-methylphenol	Ave	0.2821	0.2825	0.2000	2.00	2.00	0.2	20.0
2-Methylnaphthalene	Ave	0.7230	0.7547	0.4000	2.09	2.00	4.4	20.0
1-Methylnaphthalene	Ave	0.6947	0.7283	0.0100	2.10	2.00	4.8	20.0
Hexachlorocyclopentadiene	Ave	0.3355	0.3486	0.0500	2.08	2.00	3.9	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5732	0.6146	0.0100	2.14	2.00	7.2	20.0
2,4,6-Trichlorophenol	Ave	0.3777	0.3694	0.2000	1.96	2.00	-2.2	20.0
2,4,5-Trichlorophenol	Ave	0.3882	0.4019	0.2000	2.07	2.00	3.5	20.0

FORM VII 8270D

>0.05

<20%

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: CCVIS 180-69484/14 Calibration Date: 04/17/2013 10:46

Instrument ID: 733 Calib Start Date: 04/03/2013 06:26

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 04/03/2013 09:38

Lab File ID: N04170CC.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1'-Biphenyl	Ave	1.576	1.648	0.0100	2.09	2.00	4.6	20.0
2-Chloronaphthalene	Ave	1.198	1.223	0.8000	2.04	2.00	2.1	20.0
2-Nitroaniline	Ave	0.3230	0.3069	0.0100		2.00	-5.0	20.0
Dimethyl phthalate	Ave	1.200	1.229	0.0100	2.05	2.00	2.4	20.0
2,6-Dinitrotoluene	Ave	0.2619	0.2674	0.2000	2.04	2.00	2.1	20.0
Acenaphthylene	Ave	1.760	1.789	0.9000	2.03	2.00	1.7	20.0
3-Nitroaniline	Ave	0.3072	0.2931	0.0100		2.00	-4.6	20.0
2,4-Dinitrophenol	Qua	0.1395	0.1310	0.0100		5.00	-5.5	20.0
Acenaphthene	Ave	1.166	1.201	0.9000	2.06	2.00	3.0	20.0
4-Nitrophenol	Ave	0.1374	0.1152	0.0100		5.00	-16.2	20.0
2,4-Dinitrotoluene	Ave	0.3499	0.3616	0.2000	2.07	2.00	3.3	20.0
Dibenzofuran	Ave	1.656	1.714	0.8000	2.07	2.00	3.6	20.0
2,3,5,6-Tetrachlorophenol	Ave	0.3121	0.2963	0.0100	1.90	2.00	-5.1	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3147	0.3231	0.0100	2.05	2.00	2.7	20.0
2-Naphthylamine	Qua	0.8253	0.9071	0.0100	1.64	2.00	-18.1	20.0
Diethyl phthalate	Ave	1.190	1.208	0.0100	2.03	2.00	1.6	20.0
4-Chlorophenyl phenyl ether	Ave	0.6305	0.6774	0.4000	2.15	2.00	7.4	20.0
4-Nitroaniline	Ave	0.3106	0.2840	0.0100	1.83	2.00	-8.6	20.0
Fluorene	Ave	1.323	1.389	0.9000	2.10	2.00	5.1	20.0
4,6-Dinitro-2-methylphenol	Ave	0.1355	0.1314	0.0100	4.85	5.00	-3.0	20.0
N-Nitrosodiphenylamine	Ave	0.6669	0.6846	0.0100	2.05	2.00	2.7	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.8825	0.8677	0.0100	1.97	2.00	-1.7	20.0
4-Bromophenyl phenyl ether	Ave	0.2264	0.2418	0.1000	2.14	2.00	6.8	20.0
Hexachlorobenzene	Ave	0.2429	0.2592	0.1000	2.14	2.00	7.0	20.0
Atrazine	Ave	0.1872	0.1579	0.0100	1.69	2.00	-15.7	20.0
Pentachlorophenol	Ave	0.1569	0.1378	0.0500	4.39	5.00	-12.2	20.0
Phenanthrene	Ave	1.210	1.233	0.7000	2.04	2.00	1.9	20.0
Anthracene	Ave	1.195	1.226	0.7000	2.05	2.00	2.6	20.0
Carbazole	Ave	1.088	1.057	0.0100	1.94	2.00	-2.8	20.0
Di-n-butyl phthalate	Ave	1.291	1.233	0.0100	1.91	2.00	-4.5	20.0
Fluoranthene	Ave	1.185	1.162	0.6000	1.96	2.00	-1.9	20.0
Benzidine	Ave	0.3982	0.4658	0.0100		2.00	17.0	20.0
Pyrene	Ave	1.396	1.480	0.6000	2.12	2.00	6.0	20.0
Butyl benzyl phthalate	Ave	0.6160	0.5680	0.0100	1.84	2.00	-7.8	20.0
3,3'-Dichlorobenzidine	Ave	0.4438	0.3989	0.0100	1.80	2.00	-10.1	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.8993	0.7641	0.0100		2.00	-15.0	20.0
Benzo(a)anthracene	Ave	1.260	1.274	0.8000	2.02	2.00	1.1	20.0
Chrysene	Ave	1.208	1.223	0.7000	2.03	2.00	1.3	20.0
Di-n-octyl phthalate	Ave	1.512	1.211	0.0100		2.00	-19.9	20.0
7,12-Dimethylbenz(a)anthracene	Ave	0.5736	0.5910	0.0100	2.06	2.00	3.0	20.0

FORM VII 8270D

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: CCVIS 180-69484/14 Calibration Date: 04/17/2013 10:46

Instrument ID: 733 Calib Start Date: 04/03/2013 06:26

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 04/03/2013 09:38

Lab File ID: N04170CC.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[b]fluoranthene	Ave	1.311	1.314	0.7000	2.00	2.00	0.2	20.0
Benzo[k]fluoranthene	Ave	1.236	1.305	0.7000	2.11	2.00	5.6	20.0
Benzo[a]pyrene	Ave	1.084	1.025	0.7000	1.89	2.00	-5.4	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.408	1.318	0.5000	1.87	2.00	-6.3	20.0
Dibenz[a,h]anthracene	Ave	1.199	1.128	0.4000	1.88	2.00	-5.9	20.0
Benzo[g,h,i]perylene	Ave	1.200	1.124	0.5000	1.87	2.00	-6.3	20.0
2-Fluorophenol (Surr)	Ave	1.056	1.118		2.12	2.00	5.9	20.0
Phenol-d5 (Surr)	Ave	1.452	1.525		2.10	2.00	5.0	20.0
2-Chlorophenol-d4	Ave	1.354	1.424		2.10	2.00	5.1	
1,2-Dichlorobenzene-d4	Ave	1.033	1.143		2.21	2.00	10.7	
Nitrobenzene-d5 (Surr)	Ave	0.3640	0.3664		2.01	2.00	0.7	20.0
2-Fluorobiphenyl	Ave	1.417	1.483		2.09	2.00	4.7	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1013	0.1048	0.0100	2.07	2.00	3.4	20.0
Terphenyl-d14 (Surr)	Ave	0.9306	1.006		2.16	2.00	8.1	20.0

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Sample No.: CCVIS 180-69484/14 Date Analyzed: 04/17/2013 10:46

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): N04170CC.D Heated Purge: (Y/N) N

Calibration ID: 9046

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		180650	6.19	725427	7.41	424386	9.05
UPPER LIMIT		361300	6.69	1450854	7.91	848772	9.55
LOWER LIMIT		90325	5.69	362714	6.91	212193	8.55
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-69228/1-A		203424	6.19	856575	7.41	514531	9.05
LCS 180-69228/2-A		193242	6.19	779525	7.41	453527	9.05
180-20360-1	MB-MW-01-20130410	158635	6.18	607526	7.39	331852	9.02
180-20360-2	MB-MW-02-20130410	140549	6.19	511698	7.40	289847	9.03
180-20360-2 MS	MB-MW-02-20130410 MS	161330	6.19	596113	7.41	329954	9.03
180-20360-2 MSD	MB-MW-02-20130410 MSD	175977	6.19	642632	7.40	365080	9.03
180-20360-3	MB-MW-03-20130410	186800	6.19	745016	7.40	438201	9.03
180-20360-4	MB-MW-04-20130410	186721	6.19	702435	7.40	385809	9.03
180-20360-5	MB-MW-05-20130411	165097	6.18	612767	7.40	342587	9.02
180-20360-6	MB-MW-06-20130411	181218	6.19	734306	7.40	416131	9.03
180-20360-7	DUP-20130410	184654	6.19	735630	7.40	416624	9.03
180-20360-8	MB-FB-20130410	187988	6.18	771336	7.40	465188	9.02
180-20360-9	MB-FB-20130411	195803	6.18	807784	7.40	487690	9.02

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Sample No.: CCVIS 180-69484/14 Date Analyzed: 04/17/2013 10:46

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): N04170CC.D Heated Purge: (Y/N) N

Calibration ID: 9046

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		649843	10.42	508812	13.91	460735	16.82
UPPER LIMIT		1299686	10.92	1017624	14.41	921470	17.32
LOWER LIMIT		324922	9.92	254406	13.41	230368	16.32
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-69228/1-A		828585	10.42	606703	13.91	525134	16.82
LCS 180-69228/2-A		686292	10.42	565107	13.90	544839	16.81
180-20360-1	MB-MW-01-20130410	507505	10.39	455020	13.86	549726	16.76
180-20360-2	MB-MW-02-20130410	450044	10.40	473951	13.87	860149	16.79
180-20360-2 MS	MB-MW-02-20130410 MS	514340	10.40	523560	13.87	917409	16.78
180-20360-2 MSD	MB-MW-02-20130410 MSD	564182	10.40	540011	13.87	944541*	16.78
180-20360-3	MB-MW-03-20130410	654302	10.40	516291	13.86	502568	16.77
180-20360-4	MB-MW-04-20130410	579722	10.40	482436	13.86	520972	16.77
180-20360-5	MB-MW-05-20130411	508381	10.38	479991	13.84	553048	16.74
180-20360-6	MB-MW-06-20130411	631166	10.39	504344	13.85	506184	16.76
180-20360-7	DUP-20130410	623447	10.39	524628	13.85	543518	16.76
180-20360-8	MB-FB-20130410	710059	10.38	557916	13.85	522871	16.75
180-20360-9	MB-FB-20130411	775867	10.38	606822	13.84	578649	16.74

QC NOQUAL

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Instrument ID: 733 Start Date: 04/17/2013 10:29

Analysis Batch Number: 69484 End Date: 04/17/2013 22:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-69484/15		04/17/2013 10:29	1	N0417DF1.D	Rxi-5SilMS 0.32(mm)
CCVIS 180-69484/14		04/17/2013 10:46	1	N04170CC.D	Rxi-5SilMS 0.32(mm)
MB 180-69228/1-A		04/17/2013 12:11	1	N0417013.D	Rxi-5SilMS 0.32(mm)
LCS 180-69228/2-A		04/17/2013 14:29	1	N0417014.D	Rxi-5SilMS 0.32(mm)
180-20360-1	MB-MW-01-20130410	04/17/2013 17:44	1	N0417015.D	Rxi-5SilMS 0.32(mm)
180-20360-2	MB-MW-02-20130410	04/17/2013 18:12	1	N0417016.D	Rxi-5SilMS 0.32(mm)
180-20360-2 MS	MB-MW-02-20130410 MS	04/17/2013 18:40	1	N0417017.D	Rxi-5SilMS 0.32(mm)
180-20360-2 MSD	MB-MW-02-20130410 MSD	04/17/2013 19:08	1	N0417018.D	Rxi-5SilMS 0.32(mm)
180-20360-3	MB-MW-03-20130410	04/17/2013 19:36	1	N0417019.D	Rxi-5SilMS 0.32(mm)
180-20360-4	MB-MW-04-20130410	04/17/2013 20:04	1	N0417020.D	Rxi-5SilMS 0.32(mm)
180-20360-5	MB-MW-05-20130411	04/17/2013 20:32	1	N0417021.D	Rxi-5SilMS 0.32(mm)
180-20360-6	MB-MW-06-20130411	04/17/2013 21:00	1	N0417022.D	Rxi-5SilMS 0.32(mm)
180-20360-7	DUP-20130410	04/17/2013 21:28	1	N0417023.D	Rxi-5SilMS 0.32(mm)
180-20360-8	MB-FB-20130410	04/17/2013 21:56	1	N0417024.D	Rxi-5SilMS 0.32(mm)
180-20360-9	MB-FB-20130411	04/17/2013 22:24	1	N0417025.D	Rxi-5SilMS 0.32(mm)

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Batch Number: 69228 Batch Start Date: 04/16/13 12:30 Batch Analyst: Trout, Bill

Batch Method: 3520C Batch End Date: 04/17/13 06:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	FirstAdjustpH	OPDODADNLSPKs 00007	OPHC8270SPKs 00032
MB 180-69228/1		3520C, 8270D		5	1000 mL	10.0 mL	2		
LCS 180-69228/2		3520C, 8270D		5	1000 mL	10.0 mL	2	1 mL	1 mL
180-20360-D-2 MS	MB-MW-02-20130410	3520C, 8270D	T	7	980 mL	10.0 mL	2	1 mL	1 mL
180-20360-B-2 MSD	MB-MW-02-20130410	3520C, 8270D	T	7	980 mL	10.0 mL	2	1 mL	1 mL
180-20360-B-1	MB-MW-01-20130410	3520C, 8270D	T	7	980 mL	10.0 mL	2		
180-20360-B-2	MB-MW-02-20130410	3520C, 8270D	T	7	960 mL	10.0 mL	2		
180-20360-B-3	MB-MW-03-20130410	3520C, 8270D	T	7	900 mL	10.0 mL	2		
180-20360-D-4	MB-MW-04-20130410	3520C, 8270D	T	7	990 mL	10.0 mL	2		
180-20360-A-5	MB-MW-05-20130411	3520C, 8270D	T	7	850 mL	10.0 mL	2		
180-20360-C-6	MB-MW-06-20130411	3520C, 8270D	T	7	880 mL	10.0 mL	2		
180-20360-B-7	EBP-20130410	3520C, 8270D	T	7	980 mL	10.0 mL	2		
180-20360-D-8	MB-FB-20130410	3520C, 8270D	T	6	870 mL	10.0 mL	2		
180-20360-D-9	MB-FB-20130411	3520C, 8270D	T	6	960 mL	10.0 mL	2		

Lab Sample ID	Client Sample ID	Method Chain	Basis	OPQL-8270SUR1 00046	SVATRAZINEs 00034				
MB 180-69228/1		3520C, 8270D		1 mL					
LCS 180-69228/2		3520C, 8270D		1 mL	1 mL				
180-20360-D-2 MS	MB-MW-02-20130410	3520C, 8270D	T	1 mL	1 mL				
180-20360-B-2 MSD	MB-MW-02-20130410	3520C, 8270D	T	1 mL	1 mL				
180-20360-B-1	MB-MW-01-20130410	3520C, 8270D	T	1 mL					
180-20360-B-2	MB-MW-02-20130410	3520C, 8270D	T	1 mL					
180-20360-B-3	MB-MW-03-20130410	3520C, 8270D	T	1 mL					
180-20360-D-4	MB-MW-04-20130410	3520C, 8270D	T	1 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Batch Number: 69228 Batch Start Date: 04/16/13 12:30 Batch Analyst: Trout, Bill

Batch Method: 3520C Batch End Date: 04/17/13 06:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	OPQL-8270SURi 00046	SVATRAZINEs 00034				
180-20360-A-5	MB-MW-05-2013041 1	3520C, 8270D	T	1 mL					
180-20360-C-6	MB-MW-06-2013041 1	3520C, 8270D	T	1 mL					
180-20360-B-7	DUP-20130410	3520C, 8270D	T	1 mL					
180-20360-D-8	MB-FB-20130410	3520C, 8270D	T	1 mL					
180-20360-D-9	MB-FB-20130411	3520C, 8270D	T	1 mL					

Batch Notes	
Acid used for pH adjustment	1:1 Sulfuric acid
Acid used for pH adjust Lot #	766325
Person's name who did the concentration	cdm
N-evap #	1
Na2SO4 Lot Number	793448
pH Paper Lot Number	HC256691
Prep Solvent Lot #	787578
Prep Solvent Name	Methylene chloride
Prep Solvent Volume Used	250 mL
Person's name who did the prep	BT
Sufficient volume for MS/MSD?	yes
Uncorrected N-evap Temperature	26 Celsius
Uncorrected Temperature	75 Celsius

Basis	Basis Description
T	Total/NA

COLLECTED APRIL 10&11, 2013

<7 DAYS to EXTRACTION ✓

ANALYZED APRIL 17, 2013

<40 DAYS to ANALYSIS ✓

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Client: ENVIRON International Corp.

Job Number: 180-20360-1

Surrogate Recovery Report

8082A Polychlorinated Biphenyls (PCBs) (GC)

Client Matrix: Water

Lab Sample ID	Client Sample ID	TCX1 %Rec	DCB1 %Rec
180-20360-1	MB-MW-01-20130410	88	93
180-20360-2	MB-MW-02-20130410	94	93
180-20360-3	MB-MW-03-20130410	91	82
180-20360-4	MB-MW-04-20130410	67	77
180-20360-5	MB-MW-05-20130411	73	75
180-20360-6	MB-MW-06-20130411	78	82
180-20360-7	DUP-20130410	76	87
180-20360-8	MB-FB-20130410	76	81
180-20360-9	MB-FB-20130411	89	93
MB 180-69224/1-C		79	82
LCS 180-69224/2-C	MB-MW-02-MS-20130410	87	83
180-20360-2 MS	~~MB-MW-02-20130410~~ MS	95	94
180-20360-2 MSD	~~MB-MW-02-20130410~~ MSD	94	96
	MB-MW-02-MSD-20130410		

Surrogate	Acceptance Limits
TCX = Tetrachloro-m-xylene	47-150
DCB = DCB Decachlorobiphenyl (Surr)	50-140

FORM IV
GC SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: MB 180-69224/1-C

Matrix: Water Date Extracted: 04/16/2013 07:56

Lab File ID:(1) 00431222.D Lab File ID:(2)

Date Analyzed:(1) 04/23/2013 22:16 Date Analyzed:(2)

Instrument ID:(1) GC8 Instrument ID:(2)

GC Column:(1) RTX-50 ID: 0.53(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
MB-MW-01-20130410	180-20360-1	04/23/2013 17:46	
MB-MW-04-20130410	180-20360-4	04/23/2013 19:49	
MB-MW-05-20130411	180-20360-5	04/23/2013 20:13	
MB-MW-06-20130411	180-20360-6	04/23/2013 20:38	
DUP-20130410	180-20360-7	04/23/2013 21:02	
MB-FB-20130410	180-20360-8	04/23/2013 21:27	
MB-FB-20130411	180-20360-9	04/23/2013 21:51	
	LCS 180-69224/2-C	04/23/2013 22:41	
MB-MW-02-20130410	180-20360-2	04/24/2013 13:11	
MB-MW-02-20130410 MS	180-20360-2 MS	04/24/2013 13:35	
MB-MW-02-20130410 MSD	180-20360-2 MSD	04/24/2013 13:59	
MB-MW-03-20130410	180-20360-3	04/24/2013 14:23	

Client: ENVIRON International Corp.

Job Number: 180-20360-1

Method Blank - Batch: 180-69224

Method: 8082A
Preparation: 3510C

Lab Sample ID:	MB 180-69224/1-C	Analysis Batch:	180-70519	Instrument ID:	GC8
Client Matrix:	Water	Prep Batch:	180-69224	Lab File ID:	O0431222.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	04/23/2013 2216	Units:	ug/L	Final Weight/Volume:	1.0 mL
Prep Date:	04/16/2013 0756			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
PCB-1016	ND		0.0025	0.010
PCB-1221	ND		0.0025	0.010
PCB-1232	ND		0.0029	0.010
PCB-1242	ND		0.0019	0.010
PCB-1248	ND		0.0023	0.010
PCB-1254	ND		0.0023	0.010
PCB-1260	ND		0.0014	0.010
PCB-1262	ND		0.0021	0.010
PCB-1268	ND		0.0027	0.010

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl (Surr)	82	50 - 140
Tetrachloro-m-xylene	79	47 - 150

Lab Control Sample - Batch: 180-69224

Method: 8082A
Preparation: 3510C

Lab Sample ID:	LCS 180-69224/2-C	Analysis Batch:	180-70519	Instrument ID:	GC8
Client Matrix:	Water	Prep Batch:	180-69224	Lab File ID:	O0431223.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	04/23/2013 2241	Units:	ug/L	Final Weight/Volume:	1.0 mL
Prep Date:	04/16/2013 0756			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
PCB-1016	1.00	0.754	75	60 - 110	
PCB-1260	1.00	0.894	89	60 - 111	

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl (Surr)	83	50 - 140
Tetrachloro-m-xylene	87	47 - 150

Client: ENVIRON International Corp. Job Number: 180-20360-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 180-69224

Method: 8082A
Preparation: 3510C

MS Lab Sample ID:	180-20360-2	Analysis Batch:	180-70519	Instrument ID:	GC8
Client Matrix:	Water	Prep Batch:	180-69224	Lab File ID:	O0431227.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	04/24/2013 1335			Final Weight/Volume:	1.0 mL
Prep Date:	04/16/2013 0756			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	180-20360-2	Analysis Batch:	180-70519	Instrument ID:	GC8
Client Matrix:	Water	Prep Batch:	180-69224	Lab File ID:	O0431228.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	980 mL
Analysis Date:	04/24/2013 1359			Final Weight/Volume:	1.0 mL
Prep Date:	04/16/2013 0756			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
PCB-1016	93	80	60 - 110	13	27		
PCB-1260	93	84	60 - 111	8	24		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
DCB Decachlorobiphenyl (Surr)	94	96	50 - 140
Tetrachloro-m-xylene	95	94	47 - 150

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 180-69224

Method: 8082A
Preparation: 3510C

MS Lab Sample ID:	180-20360-2	Units:	ug/L	MSD Lab Sample ID:	180-20360-2
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/24/2013 1335			Analysis Date:	04/24/2013 1359
Prep Date:	04/16/2013 0756			Prep Date:	04/16/2013 0756
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
PCB-1016	ND	1.00	1.02	0.930	0.814
PCB-1260	ND	1.00	1.02	0.927	0.857

Client: ENVIRON International Corp.

Job Number: 180-20360-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 180-69224					
LCS 180-69224/2-C	Lab Control Sample	T	Water	3510C	
MB 180-69224/1-C	Method Blank	T	Water	3510C	
180-20360-1	MB-MW-01-20130410	T	Water	3510C	
180-20360-2	MB-MW-02-20130410	T	Water	3510C	
180-20360-2MS	Matrix Spike	T	Water	3510C	
180-20360-2MSD	Matrix Spike Duplicate	T	Water	3510C	
180-20360-3	MB-MW-03-20130410	T	Water	3510C	
180-20360-4	MB-MW-04-20130410	T	Water	3510C	
180-20360-5	MB-MW-05-20130411	T	Water	3510C	
180-20360-6	MB-MW-06-20130411	T	Water	3510C	
180-20360-7	DUP-20130410	T	Water	3510C	
180-20360-8	MB-FB-20130410	T	Water	3510C	
180-20360-9	MB-FB-20130411	T	Water	3510C	
Analysis Batch:180-70519					
LCS 180-69224/2-C	Lab Control Sample	T	Water	8082A	180-69224
MB 180-69224/1-C	Method Blank	T	Water	8082A	180-69224
180-20360-1	MB-MW-01-20130410	T	Water	8082A	180-69224
180-20360-2	MB-MW-02-20130410	T	Water	8082A	180-69224
180-20360-2MS	Matrix Spike	T	Water	8082A	180-69224
180-20360-2MSD	Matrix Spike Duplicate	T	Water	8082A	180-69224
180-20360-3	MB-MW-03-20130410	T	Water	8082A	180-69224
180-20360-4	MB-MW-04-20130410	T	Water	8082A	180-69224
180-20360-5	MB-MW-05-20130411	T	Water	8082A	180-69224
180-20360-6	MB-MW-06-20130411	T	Water	8082A	180-69224
180-20360-7	DUP-20130410	T	Water	8082A	180-69224
180-20360-8	MB-FB-20130410	T	Water	8082A	180-69224
180-20360-9	MB-FB-20130411	T	Water	8082A	180-69224

Report Basis
T = Total

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68752

SDG No.:

Instrument ID: GC8 GC Column: RTX-50 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2013 07:46 Calibration End Date: 04/04/2013 09:24 Calibration ID: 9162

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-68752/1	00430500.D
Level 2	IC 180-68752/2	00430501.D
Level 3	IC 180-68752/3	00430502.D
Level 4	IC 180-68752/4	00430503.D
Level 5	IC 180-68752/5	00430504.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	RT WINDOW	AVG RT
PCB-1221 Peak 1	4.988	4.996	4.998	5.003	5.005	4.973 - 5.033	4.998
PCB-1221 Peak 2	5.257	5.267	5.271	5.275	5.277	5.245 - 5.305	5.270
PCB-1221 Peak 3	5.375	5.383	5.388	5.392	5.395	5.362 - 5.422	5.387
PCB-1254 Peak 1	8.105	8.110	8.111	8.115	8.116	8.085 - 8.145	8.112
PCB-1254 Peak 2	8.415	8.422	8.424	8.427	8.429	8.397 - 8.457	8.423
PCB-1254 Peak 3	8.629	8.634	8.637	8.640	8.641	8.610 - 8.670	8.636
PCB-1254 Peak 4	8.731	8.738	8.741	8.743	8.744	8.713 - 8.773	8.739
PCB-1254 Peak 5	9.128	9.132	9.135	9.135	9.137	9.105 - 9.165	9.134

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68752

SDG No.:

Instrument ID: GC8 GC Column: RTX-50 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2013 07:46 Calibration End Date: 04/04/2013 09:24 Calibration ID: 9162

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-68752/1	00430500.D
Level 2	IC 180-68752/2	00430501.D
Level 3	IC 180-68752/3	00430502.D
Level 4	IC 180-68752/4	00430503.D
Level 5	IC 180-68752/5	00430504.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
PCB-1221 Peak 1	89700 71826	83500	78488	77004	Ave		80103.6000				8.5		20.0			
PCB-1221 Peak 2	82500 62202	73770	64032	67224	Ave		69945.6000				11.8		20.0			
PCB-1221 Peak 3	278400 199466	244140	212828	216644	Ave		230295.600				13.6		20.0			
PCB-1254 Peak 1	195200 168744	177880	166540	176444	Ave		176961.600				6.4		20.0			
PCB-1254 Peak 2	247800 201509	226830	211352	218072	Ave		221112.600				7.9		20.0			
PCB-1254 Peak 3	205400 165591	189200	176956	182018	Ave		183833.000				8.1		20.0			
PCB-1254 Peak 4	204300 170344	180290	179184	185414	Ave		183906.400				6.9		20.0			
PCB-1254 Peak 5	481200 371321	423780	403620	410010	Ave		417986.200				9.6		20.0			

<20%

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68752

SDG No.:

Instrument ID: GC8 GC Column: RTX-50 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2013 07:46 Calibration End Date: 04/04/2013 09:24 Calibration ID: 9162

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-68752/1	00430500.D
Level 2	IC 180-68752/2	00430501.D
Level 3	IC 180-68752/3	00430502.D
Level 4	IC 180-68752/4	00430503.D
Level 5	IC 180-68752/5	00430504.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1221 Peak 1	Ave	897	8350	19622	38502	71826	0.0100	0.100	0.250	0.500	1.00
PCB-1221 Peak 2	Ave	825	7377	16008	33612	62202	0.0100	0.100	0.250	0.500	1.00
PCB-1221 Peak 3	Ave	2784	24414	53207	108322	199466	0.0100	0.100	0.250	0.500	1.00
PCB-1254 Peak 1	Ave	1952	17788	41635	88222	168744	0.0100	0.100	0.250	0.500	1.00
PCB-1254 Peak 2	Ave	2478	22683	52838	109036	201509	0.0100	0.100	0.250	0.500	1.00
PCB-1254 Peak 3	Ave	2054	18920	44239	91009	165591	0.0100	0.100	0.250	0.500	1.00
PCB-1254 Peak 4	Ave	2043	18029	44796	92707	170344	0.0100	0.100	0.250	0.500	1.00
PCB-1254 Peak 5	Ave	4812	42378	100905	205005	371321	0.0100	0.100	0.250	0.500	1.00

Curve Type Legend:
Ave = Average by Height

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68752

SDG No.:

Instrument ID: GC8 GC Column: RTX-50 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2013 09:49 Calibration End Date: 04/04/2013 11:27 Calibration ID: 9163

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-68752/6	00430505.D
Level 2	IC 180-68752/7	00430506.D
Level 3	IC 180-68752/8	00430507.D
Level 4	IC 180-68752/9	00430508.D
Level 5	IC 180-68752/10	00430509.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	RT WINDOW	AVG RT
PCB-1242 Peak 1	7.239	7.241	7.241	7.241	7.242	7.209 - 7.269	7.241
PCB-1242 Peak 2	7.320	7.320	7.320	7.321	7.321	7.290 - 7.350	7.320
PCB-1242 Peak 3	7.739	7.740	7.739	7.741	7.742	7.709 - 7.769	7.740
PCB-1242 Peak 4	8.121	8.120	8.119	8.121	8.120	8.091 - 8.151	8.120
PCB-1242 Peak 5	8.500	8.499	8.498	8.498	8.499	8.470 - 8.530	8.499

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68752

SDG No.:

Instrument ID: GC8 GC Column: RTX-50 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2013 09:49 Calibration End Date: 04/04/2013 11:27 Calibration ID: 9163

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-68752/6	00430505.D
Level 2	IC 180-68752/7	00430506.D
Level 3	IC 180-68752/8	00430507.D
Level 4	IC 180-68752/9	00430508.D
Level 5	IC 180-68752/10	00430509.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
PCB-1242 Peak 1	176900 146714	167210	159404	152348	Ave		160515.200				7.4		20.0			
PCB-1242 Peak 2	186400 147386	183410	167960	160408	Ave		169112.800				9.6		20.0			
PCB-1242 Peak 3	291700 220588	256210	231224	234938	Ave		246932.000				11.4		20.0			
PCB-1242 Peak 4	235500 194203	208820	188060	198704	Ave		205057.400				9.1		20.0			
PCB-1242 Peak 5	162100 163808	159640	151500	159386	Ave		159286.800				3.0		20.0			

<20.1

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68752

SDG No.:

Instrument ID: GC8 GC Column: RTX-50 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2013 09:49 Calibration End Date: 04/04/2013 11:27 Calibration ID: 9163

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-68752/6	00430505.D
Level 2	IC 180-68752/7	00430506.D
Level 3	IC 180-68752/8	00430507.D
Level 4	IC 180-68752/9	00430508.D
Level 5	IC 180-68752/10	00430509.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1242 Peak 1	Ave	1769	16721	39851	76174	146714	0.0100	0.100	0.250	0.500	1.00
PCB-1242 Peak 2	Ave	1864	18341	41990	80204	147386	0.0100	0.100	0.250	0.500	1.00
PCB-1242 Peak 3	Ave	2917	25621	57806	117469	220588	0.0100	0.100	0.250	0.500	1.00
PCB-1242 Peak 4	Ave	2355	20882	47015	99352	194208	0.0100	0.100	0.250	0.500	1.00
PCB-1242 Peak 5	Ave	1621	15964	37875	79693	163808	0.0100	0.100	0.250	0.500	1.00

Curve Type Legend:
Ave = Average by Height

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68752

SDG No.:

Instrument ID: GC8 GC Column: RTX-50 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2013 11:51 Calibration End Date: 04/04/2013 13:29 Calibration ID: 9164

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-68752/11	00430510.D
Level 2	IC 180-68752/12	00430511.D
Level 3	IC 180-68752/13	00430512.D
Level 4	IC 180-68752/14	00430513.D
Level 5	IC 180-68752/15	00430514.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
PCB-1248 Peak 1	6.825	6.822	6.822	6.824	6.823						6.793 - 6.853	6.823
PCB-1248 Peak 2	7.741	7.741	7.741	7.742	7.742						7.712 - 7.772	7.741
PCB-1248 Peak 3	7.903	7.904	7.903	7.904	7.904						7.874 - 7.934	7.904
PCB-1248 Peak 4	8.170	8.169	8.169	8.170	8.169						8.139 - 8.199	8.169
PCB-1248 Peak 5	8.364	8.364	8.364	8.365	8.364						8.334 - 8.394	8.364

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68752

SDG No.:

Instrument ID: GC8 GC Column: RTX-50 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2013 11:51 Calibration End Date: 04/04/2013 13:29 Calibration ID: 9164

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-68752/11	00430510.D
Level 2	IC 180-68752/12	00430511.D
Level 3	IC 180-68752/13	00430512.D
Level 4	IC 180-68752/14	00430513.D
Level 5	IC 180-68752/15	00430514.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
PCB-1248 Peak 1	480300 369989	424420	375928	384858	Ave		407099.000				11.3		20.0			
PCB-1248 Peak 2	470000 341777	416960	368516	364234	Ave		392297.400				13.1		20.0			
PCB-1248 Peak 3	261400 224255	265140	234812	241004	Ave		249322.200				9.4		20.0			
PCB-1248 Peak 4	293200 266787	283290	257040	277014	Ave		275466.200				5.1		20.0			
PCB-1248 Peak 5	181000 150018	183680	154852	165926	Ave		167095.200				9.0		20.0			

<20%.

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68752

SDG No.:

Instrument ID: GC8 GC Column: RTX-50 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2013 11:51 Calibration End Date: 04/04/2013 13:29 Calibration ID: 9164

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-68752/11	00430510.D
Level 2	IC 180-68752/12	00430511.D
Level 3	IC 180-68752/13	00430512.D
Level 4	IC 180-68752/14	00430513.D
Level 5	IC 180-68752/15	00430514.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1248 Peak 1	Ave	4803	42442	93982	192429	369989	0.0100	0.100	0.250	0.500	1.00
PCB-1248 Peak 2	Ave	4700	41696	92129	182117	341777	0.0100	0.100	0.250	0.500	1.00
PCB-1248 Peak 3	Ave	2814	26514	58703	120502	224255	0.0100	0.100	0.250	0.500	1.00
PCB-1248 Peak 4	Ave	2932	28329	64260	138507	266787	0.0100	0.100	0.250	0.500	1.00
PCB-1248 Peak 5	Ave	1810	18368	38713	82963	150018	0.0100	0.100	0.250	0.500	1.00

Curve Type Legend:
Ave = Average by Height

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68752

SDG No.:

Instrument ID: GC8 GC Column: RTX-50 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2013 13:54 Calibration End Date: 04/04/2013 13:54 Calibration ID: 9165

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-68752/16	00430515.D

ANALYTE	LVL 1										RT WINDOW	AVG RT
PCB-1232 Peak 1	6.659										6.629 - 6.689	6.659
PCB-1232 Peak 2	7.377										7.347 - 7.407	7.377
PCB-1232 Peak 3	7.742										7.712 - 7.772	7.742
PCB-1232 Peak 4	8.042										8.012 - 8.072	8.042
PCB-1232 Peak 5	8.953										8.923 - 8.983	8.953

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68752

SDG No.:

Instrument ID: GC8 GC Column: RTX-50 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2013 13:54 Calibration End Date: 04/04/2013 13:54 Calibration ID: 9165

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-68752/16	00430515.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1232 Peak 1	93358				Ave		93358.0000						20.0			
PCB-1232 Peak 2	79904				Ave		79904.0000						20.0			
PCB-1232 Peak 3	129632				Ave		129632.000						20.0			
PCB-1232 Peak 4	46962				Ave		46962.0000						20.0			
PCB-1232 Peak 5	47012				Ave		47012.0000						20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68752

SDG No.:

Instrument ID: GC8 GC Column: RTX-50 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2013 13:54 Calibration End Date: 04/04/2013 13:54 Calibration ID: 9165

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-68752/16	00430515.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1					LVL 1				
PCB-1232 Peak 1	Ave	46679					0.500				
PCB-1232 Peak 2	Ave	39952					0.500				
PCB-1232 Peak 3	Ave	64816					0.500				
PCB-1232 Peak 4	Ave	23481					0.500				
PCB-1232 Peak 5	Ave	23506					0.500				

Curve Type Legend:

Ave = Average by Height

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68752

SDG No.:

Instrument ID: GC8 GC Column: RTX-50 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2013 14:19 Calibration End Date: 04/04/2013 14:19 Calibration ID: 9166

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-68752/17	00430516.D

ANALYTE	LVL 1										RT WINDOW	AVG RT
PCB-1262 Peak 1	9.533										9.503 - 9.563	9.533
PCB-1262 Peak 2	9.655										9.625 - 9.685	9.655
PCB-1262 Peak 3	10.390										10.360 - 10.420	10.390
PCB-1262 Peak 4	11.385										11.355 - 11.415	11.385
PCB-1262 Peak 5	12.751										12.721 - 12.781	12.751

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68752

SDG No.:

Instrument ID: GC8 GC Column: RTX-50 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2013 14:19 Calibration End Date: 04/04/2013 14:19 Calibration ID: 9166

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-68752/17	00430516.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1262 Peak 1	164192				Ave		164192.000						20.0			
PCB-1262 Peak 2	238222				Ave		238222.000						20.0			
PCB-1262 Peak 3	402418				Ave		402418.000						20.0			
PCB-1262 Peak 4	347066				Ave		347066.000						20.0			
PCB-1262 Peak 5	224290				Ave		224290.000						20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68752

SDG No.:

Instrument ID: GC8 GC Column: RTX-50 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2013 14:19 Calibration End Date: 04/04/2013 14:19 Calibration ID: 9166

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-68752/17	00430516.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1					LVL 1				
PCB-1262 Peak 1	Ave	82096					0.500				
PCB-1262 Peak 2	Ave	119111					0.500				
PCB-1262 Peak 3	Ave	201209					0.500				
PCB-1262 Peak 4	Ave	173533					0.500				
PCB-1262 Peak 5	Ave	112145					0.500				

Curve Type Legend:
Ave = Average by Height

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68752

SDG No.:

Instrument ID: GC8 GC Column: RTX-50 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2013 14:43 Calibration End Date: 04/04/2013 14:43 Calibration ID: 9167

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-68752/18	00430517.D

ANALYTE	LVL 1										RT WINDOW	AVG RT
PCB-1268 Peak 1	11.387										11.357 - 11.417	11.387
PCB-1268 Peak 2	11.519										11.489 - 11.549	11.519
PCB-1268 Peak 3	12.106										12.076 - 12.136	12.106
PCB-1268 Peak 4	13.829										13.799 - 13.859	13.829

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68752

SDG No.:

Instrument ID: GC8 GC Column: RTX-50 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2013 14:43 Calibration End Date: 04/04/2013 14:43 Calibration ID: 9167

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-68752/18	00430517.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1268 Peak 1	1260502				Ave		1260502.00						20.0			
PCB-1268 Peak 2	1035462				Ave		1035462.00						20.0			
PCB-1268 Peak 3	930662				Ave		930662.000						20.0			
PCB-1268 Peak 4	1901078				Ave		1901078.00						20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68752

SDG No.:

Instrument ID: GC8 GC Column: RTX-50 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2013 14:43 Calibration End Date: 04/04/2013 14:43 Calibration ID: 9167

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-68752/18	O0430517.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1					LVL 1				
PCB-1268 Peak 1	Ave	630251					0.500				
PCB-1268 Peak 2	Ave	517731					0.500				
PCB-1268 Peak 3	Ave	465331					0.500				
PCB-1268 Peak 4	Ave	950539					0.500				

Curve Type Legend:
Ave = Average by Height

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68752

SDG No.:

Instrument ID: GC8 GC Column: RTX-50 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2013 15:08 Calibration End Date: 04/04/2013 17:35 Calibration ID: 9168

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-68752/19	00430518.D
Level 2	IC 180-68752/20	00430519.D
Level 3	IC 180-68752/21	00430520.D
Level 4	ICRT 180-68752/22	00430521.D
Level 5	IC 180-68752/23	00430522.D
Level 6	IC 180-68752/24	00430523.D
Level 7	IC 180-68752/25	00430524.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	RT WINDOW	AVG RT
PCB-1016 Peak 1	6.180	6.183	6.182	6.184	6.184	6.184	6.183	6.150 - 6.210	6.183
PCB-1016 Peak 2	6.538	6.539	6.540	6.541	6.540	6.541	6.539	6.508 - 6.568	6.540
PCB-1016 Peak 3	6.663	6.662	6.662	6.663	6.663	6.662	6.662	6.633 - 6.693	6.662
PCB-1016 Peak 4	7.247	7.246	7.247	7.248	7.247	7.247	7.246	7.217 - 7.277	7.247
PCB-1016 Peak 5	7.324	7.326	7.326	7.326	7.325	7.325	7.325	7.294 - 7.354	7.325
PCB-1260 Peak 1	9.147	9.147	9.146	9.149	9.147	9.148	9.147	9.117 - 9.177	9.147
PCB-1260 Peak 2	9.278	9.279	9.280	9.280	9.279	9.279	9.279	9.248 - 9.308	9.279
PCB-1260 Peak 3	9.808	9.806	9.806	9.808	9.805	9.805	9.804	9.778 - 9.838	9.806
PCB-1260 Peak 4	9.884	9.883	9.884	9.885	9.885	9.884	9.884	9.854 - 9.914	9.884
PCB-1260 Peak 5	10.673	10.676	10.676	10.675	10.674	10.674	10.672	10.643 - 10.703	10.674
Tetrachloro-m-xylene	4.348	4.351	4.351	4.353	4.352	4.352	4.349	4.318 - 4.378	4.351
DCB Decachlorobipheny1 (Surr)	14.786	14.788	14.791	14.789	14.789	14.786	14.786	14.756 - 14.816	14.788

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68752

SDG No.:

Instrument ID: GC8 GC Column: RTX-50 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2013 15:08 Calibration End Date: 04/04/2013 17:35 Calibration ID: 9168

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-68752/19	00430518.D
Level 2	IC 180-68752/20	00430519.D
Level 3	IC 180-68752/21	00430520.D
Level 4	ICRT 180-68752/22	00430521.D
Level 5	IC 180-68752/23	00430522.D
Level 6	IC 180-68752/24	00430523.D
Level 7	IC 180-68752/25	00430524.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1016 Peak 1	444300 364654	416580 337298	417505 329142	382710	Ave		384598.357				11.3		20.0			
PCB-1016 Peak 2	144900 121426	131400 114420	136295 113389	125740	Ave		126795.607				9.1		20.0			
PCB-1016 Peak 3	283300 201398	236080 189945	231575 187944	210828	Ave		220152.893				15.2		20.0			
PCB-1016 Peak 4	190100 184769	186860 176643	197360 184258	189336	Ave		187046.429				3.4		20.0			
PCB-1016 Peak 5	208700 189835	187320 159374	201805 169636	200108	Ave		188111.036				9.5		20.0			
PCB-1260 Peak 1	701200 579646	638240 559695	633305 567373	598264	Ave		611103.250				8.2		20.0			
PCB-1260 Peak 2	715500 660673	680100 664309	696875 689302	663836	Ave		681513.607				3.0		20.0			
PCB-1260 Peak 3	445500 451412	435760 442315	464520 464180	444532	Ave		449745.464				2.4		20.0			
PCB-1260 Peak 4	535300 491866	542500 503220	562655 509090	526552	Ave		524454.643				4.7		20.0			
PCB-1260 Peak 5	761800 861648	762040 869179	871530 920958	844168	Ave		841617.536				7.0		20.0			
Tetrachloro-m-xylene	9558000 9502620	9370400 8931500	9991200 9097445	9852400	Ave		9471937.86				4.0		20.0			
DCB Decachlorobiphenyl (Surr)	4448000 4242540	4474800 4125530	4788000 4063530	4415000	Ave		4365342.86				5.6		20.0			

<20%.

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1 Analy Batch No.: 68752

SDG No.:

Instrument ID: GC8 GC Column: RTX-50 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/04/2013 15:08 Calibration End Date: 04/04/2013 17:35 Calibration ID: 9168

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-68752/19	00430518.D
Level 2	IC 180-68752/20	00430519.D
Level 3	IC 180-68752/21	00430520.D
Level 4	ICRT 180-68752/22	00430521.D
Level 5	IC 180-68752/23	00430522.D
Level 6	IC 180-68752/24	00430523.D
Level 7	IC 180-68752/25	00430524.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1016 Peak 1	Ave	4443 674596	20829 1316566	83501	191355	364654	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1016 Peak 2	Ave	1449 228839	6570 453555	27259	62870	121426	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1016 Peak 3	Ave	2833 379890	11804 751777	46315	105414	201398	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1016 Peak 4	Ave	1901 353285	9343 737030	39472	94668	184769	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1016 Peak 5	Ave	2087 318747	9366 678543	40361	100054	189835	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1260 Peak 1	Ave	7012 1119390	31912 2269491	126661	299132	579646	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1260 Peak 2	Ave	7155 1328618	34005 2757209	139375	331918	660673	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1260 Peak 3	Ave	4455 884629	21788 1856719	92904	222266	451412	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1260 Peak 4	Ave	5353 1006439	27125 2036360	112531	263276	491866	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1260 Peak 5	Ave	7618 1738357	38102 3683833	174306	422084	861648	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
Tetrachloro-m-xylene	Ave	4779 893150	23426 1819489	99912	246310	475131	0.000500 0.100	0.00250 0.200	0.0100	0.0250	0.0500
DCB Decachlorobiphenyl (Surr)	Ave	2224 412553	11187 812706	47880	110375	212127	0.000500 0.100	0.00250 0.200	0.0100	0.0250	0.0500

Curve Type Legend:
Ave = Average by Height

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: ICV 180-68752/26 Calibration Date: 04/04/2013 17:59

Instrument ID: GC8 Calib Start Date: 04/04/2013 07:46

GC Column: RTX-50 ID: 0.53(mm) Calib End Date: 04/04/2013 09:24

Lab File ID: 00430525.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1221 Peak 1	Ave	80104	78713		0.491	0.500	-1.7	20.0
PCB-1221 Peak 2	Ave	69946	68988		0.493	0.500	-1.4	20.0
PCB-1221 Peak 3	Ave	230296	221110		0.480	0.500	-4.0	20.0
PCB-1254 Peak 1	Ave	176962	197556		0.558	0.500	11.6	20.0
PCB-1254 Peak 2	Ave	221113	241032		0.545	0.500	9.0	20.0
PCB-1254 Peak 3	Ave	183833	195252		0.531	0.500	6.2	20.0
PCB-1254 Peak 4	Ave	183906	201486		0.548	0.500	9.6	20.0
PCB-1254 Peak 5	Ave	417986	452954		0.542	0.500	8.4	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: ICV 180-68752/26 Calibration Date: 04/04/2013 17:59

Instrument ID: GC8 Calib Start Date: 04/04/2013 07:46

GC Column: RTX-50 ID: 0.53(mm) Calib End Date: 04/04/2013 09:24

Lab File ID: 00430525.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1221 Peak 1	5.01	4.97	5.03
PCB-1221 Peak 2	5.28	5.25	5.31
PCB-1221 Peak 3	5.40	5.36	5.42
PCB-1254 Peak 1	8.12	8.08	8.14
PCB-1254 Peak 2	8.43	8.40	8.46
PCB-1254 Peak 3	8.65	8.61	8.67
PCB-1254 Peak 4	8.75	8.71	8.77
PCB-1254 Peak 5	9.14	9.11	9.17

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: ICV 180-68752/27 Calibration Date: 04/04/2013 18:24

Instrument ID: GC8 Calib Start Date: 04/04/2013 13:54

GC Column: RTX-50 ID: 0.53(mm) Calib End Date: 04/04/2013 13:54

Lab File ID: 00430526.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1232 Peak 1	Ave	93358	86892		0.465	0.500	-6.9	20.0
PCB-1232 Peak 2	Ave	79904	88192		0.552	0.500	10.4	20.0
PCB-1232 Peak 3	Ave	129632	122242		0.471	0.500	-5.7	20.0
PCB-1232 Peak 4	Ave	46962	43174		0.460	0.500	-8.1	20.0
PCB-1232 Peak 5	Ave	47012	40004		0.425	0.500	-14.9	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: ICV 180-68752/27 Calibration Date: 04/04/2013 18:24

Instrument ID: GC8 Calib Start Date: 04/04/2013 13:54

GC Column: RTX-50 ID: 0.53(mm) Calib End Date: 04/04/2013 13:54

Lab File ID: 00430526.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1232 Peak 1	6.66	6.63	6.69
PCB-1232 Peak 2	7.38	7.35	7.41
PCB-1232 Peak 3	7.75	7.71	7.77
PCB-1232 Peak 4	8.05	8.01	8.07
PCB-1232 Peak 5	8.96	8.92	8.98

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: ICV 180-68752/28 Calibration Date: 04/04/2013 18:48

Instrument ID: GC8 Calib Start Date: 04/04/2013 09:49

GC Column: RTX-50 ID: 0.53(mm) Calib End Date: 04/04/2013 11:27

Lab File ID: 00430527.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1242 Peak 1	Ave	160515	171858		0.535	0.500	7.1	20.0
PCB-1242 Peak 2	Ave	169113	171422		0.507	0.500	1.4	20.0
PCB-1242 Peak 3	Ave	246932	252806		0.512	0.500	2.4	20.0
PCB-1242 Peak 4	Ave	205057	227380		0.554	0.500	10.9	20.0
PCB-1242 Peak 5	Ave	159287	185480		0.582	0.500	16.4	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: ICV 180-68752/28 Calibration Date: 04/04/2013 18:48

Instrument ID: GC8 Calib Start Date: 04/04/2013 09:49

GC Column: RTX-50 ID: 0.53(mm) Calib End Date: 04/04/2013 11:27

Lab File ID: 00430527.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1242 Peak 1	7.24	7.21	7.27
PCB-1242 Peak 2	7.32	7.29	7.35
PCB-1242 Peak 3	7.74	7.71	7.77
PCB-1242 Peak 4	8.12	8.09	8.15
PCB-1242 Peak 5	8.50	8.47	8.53

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: ICV 180-68752/29 Calibration Date: 04/04/2013 19:13

Instrument ID: GC8 Calib Start Date: 04/04/2013 11:51

GC Column: RTX-50 ID: 0.53(mm) Calib End Date: 04/04/2013 13:29

Lab File ID: 00430528.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1248 Peak 1	Ave	407099	328570		0.404	0.500	-19.3	20.0
PCB-1248 Peak 2	Ave	392297	317719		0.405	0.500	-19.0	20.0
PCB-1248 Peak 3	Ave	249322	207596		0.416	0.500	-16.7	20.0
PCB-1248 Peak 4	Ave	275466	250916		0.455	0.500	-8.9	20.0
PCB-1248 Peak 5	Ave	167095	151584		0.454	0.500	-9.3	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: ICV 180-68752/29 Calibration Date: 04/04/2013 19:13

Instrument ID: GC8 Calib Start Date: 04/04/2013 11:51

GC Column: RTX-50 ID: 0.53(mm) Calib End Date: 04/04/2013 13:29

Lab File ID: 00430528.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1248 Peak 1	6.82	6.79	6.85
PCB-1248 Peak 2	7.74	7.71	7.77
PCB-1248 Peak 3	7.90	7.87	7.93
PCB-1248 Peak 4	8.17	8.14	8.20
PCB-1248 Peak 5	8.36	8.33	8.39

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: ICV 180-68752/30 Calibration Date: 04/04/2013 19:37

Instrument ID: GC8 Calib Start Date: 04/04/2013 14:19

GC Column: RTX-50 ID: 0.53(mm) Calib End Date: 04/04/2013 14:19

Lab File ID: 00430529.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1262 Peak 1	Ave	164192	165946		0.505	0.500	1.1	20.0
PCB-1262 Peak 2	Ave	238222	239464		0.503	0.500	0.5	20.0
PCB-1262 Peak 3	Ave	402418	409160		0.508	0.500	1.7	20.0
PCB-1262 Peak 4	Ave	347066	351790		0.507	0.500	1.4	20.0
PCB-1262 Peak 5	Ave	224290	222344		0.496	0.500	-0.9	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: ICV 180-68752/30 Calibration Date: 04/04/2013 19:37

Instrument ID: GC8 Calib Start Date: 04/04/2013 14:19

GC Column: RTX-50 ID: 0.53(mm) Calib End Date: 04/04/2013 14:19

Lab File ID: 00430529.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1262 Peak 1	9.53	9.50	9.56
PCB-1262 Peak 2	9.65	9.62	9.68
PCB-1262 Peak 3	10.39	10.36	10.42
PCB-1262 Peak 4	11.38	11.35	11.41
PCB-1262 Peak 5	12.75	12.72	12.78

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: ICV 180-68752/31 Calibration Date: 04/04/2013 20:02

Instrument ID: GC8 Calib Start Date: 04/04/2013 14:43

GC Column: RTX-50 ID: 0.53(mm) Calib End Date: 04/04/2013 14:43

Lab File ID: C0430530.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1268 Peak 1	Ave	1260502	1194804		0.474	0.500	-5.2	20.0
PCB-1268 Peak 2	Ave	1035462	975254		0.471	0.500	-5.8	20.0
PCB-1268 Peak 3	Ave	930662	882818		0.474	0.500	-5.1	20.0
PCB-1268 Peak 4	Ave	1901078	1811736		0.477	0.500	-4.7	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: ICV 180-68752/31 Calibration Date: 04/04/2013 20:02

Instrument ID: GC8 Calib Start Date: 04/04/2013 14:43

GC Column: RTX-50 ID: 0.53(mm) Calib End Date: 04/04/2013 14:43

Lab File ID: 00430530.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1268 Peak 1	11.38	11.36	11.42
PCB-1268 Peak 2	11.51	11.49	11.55
PCB-1268 Peak 3	12.10	12.08	12.14
PCB-1268 Peak 4	13.82	13.80	13.86

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: ICV 180-68752/32 Calibration Date: 04/04/2013 20:27

Instrument ID: GC8 Calib Start Date: 04/04/2013 15:08

GC Column: RTX-50 ID: 0.53(mm) Calib End Date: 04/04/2013 17:35

Lab File ID: 00430531.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	384598	366296		0.476	0.500	-4.8	20.0
PCB-1016 Peak 2	Ave	126796	122590		0.483	0.500	-3.3	20.0
PCB-1016 Peak 3	Ave	220153	204128		0.464	0.500	-7.3	20.0
PCB-1016 Peak 4	Ave	187046	180966		0.484	0.500	-3.3	20.0
PCB-1016 Peak 5	Ave	188111	186788		0.496	0.500	-0.7	20.0
PCB-1260 Peak 1	Ave	611103	603102		0.493	0.500	-1.3	20.0
PCB-1260 Peak 2	Ave	681514	668456		0.490	0.500	-1.9	20.0
PCB-1260 Peak 3	Ave	449745	456638		0.508	0.500	1.5	20.0
PCB-1260 Peak 4	Ave	524455	550996		0.525	0.500	5.1	20.0
PCB-1260 Peak 5	Ave	841618	852836		0.507	0.500	1.3	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: ICV 180-68752/32 Calibration Date: 04/04/2013 20:27

Instrument ID: GC8 Calib Start Date: 04/04/2013 15:08

GC Column: RTX-50 ID: 0.53(mm) Calib End Date: 04/04/2013 17:35

Lab File ID: 00430531.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	6.18	6.15	6.21
PCB-1016 Peak 2	6.54	6.51	6.57
PCB-1016 Peak 3	6.66	6.63	6.69
PCB-1016 Peak 4	7.24	7.22	7.28
PCB-1016 Peak 5	7.32	7.29	7.35
PCB-1260 Peak 1	9.14	9.12	9.18
PCB-1260 Peak 2	9.28	9.25	9.31
PCB-1260 Peak 3	9.80	9.78	9.84
PCB-1260 Peak 4	9.88	9.85	9.91
PCB-1260 Peak 5	10.67	10.64	10.70
DCB Decachlorobiphenyl (Surr)	0.00	14.76	14.82
Tetrachloro-m-xylene	0.00	4.32	4.38

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Instrument ID: GC8 Start Date: 04/04/2013 07:46

Analysis Batch Number: 68752 End Date: 04/05/2013 06:16

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 180-68752/1		04/04/2013 07:46	1	00430500.D	RTX-50 0.53(mm)
IC 180-68752/2		04/04/2013 08:10	1	00430501.D	RTX-50 0.53(mm)
IC 180-68752/3		04/04/2013 08:35	1	00430502.D	RTX-50 0.53(mm)
IC 180-68752/4		04/04/2013 08:59	1	00430503.D	RTX-50 0.53(mm)
IC 180-68752/5		04/04/2013 09:24	1	00430504.D	RTX-50 0.53(mm)
IC 180-68752/6		04/04/2013 09:49	1	00430505.D	RTX-50 0.53(mm)
IC 180-68752/7		04/04/2013 10:13	1	00430506.D	RTX-50 0.53(mm)
IC 180-68752/8		04/04/2013 10:38	1	00430507.D	RTX-50 0.53(mm)
IC 180-68752/9		04/04/2013 11:02	1	00430508.D	RTX-50 0.53(mm)
IC 180-68752/10		04/04/2013 11:27	1	00430509.D	RTX-50 0.53(mm)
IC 180-68752/11		04/04/2013 11:51	1	00430510.D	RTX-50 0.53(mm)
IC 180-68752/12		04/04/2013 12:16	1	00430511.D	RTX-50 0.53(mm)
IC 180-68752/13		04/04/2013 12:40	1	00430512.D	RTX-50 0.53(mm)
IC 180-68752/14		04/04/2013 13:05	1	00430513.D	RTX-50 0.53(mm)
IC 180-68752/15		04/04/2013 13:29	1	00430514.D	RTX-50 0.53(mm)
IC 180-68752/16		04/04/2013 13:54	1	00430515.D	RTX-50 0.53(mm)
IC 180-68752/17		04/04/2013 14:19	1	00430516.D	RTX-50 0.53(mm)
IC 180-68752/18		04/04/2013 14:43	1	00430517.D	RTX-50 0.53(mm)
IC 180-68752/19		04/04/2013 15:08	1	00430518.D	RTX-50 0.53(mm)
IC 180-68752/20		04/04/2013 15:32	1	00430519.D	RTX-50 0.53(mm)
IC 180-68752/21		04/04/2013 15:57	1	00430520.D	RTX-50 0.53(mm)
ICRT 180-68752/22		04/04/2013 16:21	1	00430521.D	RTX-50 0.53(mm)
IC 180-68752/23		04/04/2013 16:46	1	00430522.D	RTX-50 0.53(mm)
IC 180-68752/24		04/04/2013 17:10	1	00430523.D	RTX-50 0.53(mm)
IC 180-68752/25		04/04/2013 17:35	1	00430524.D	RTX-50 0.53(mm)
ICV 180-68752/26		04/04/2013 17:59	1	00430525.D	RTX-50 0.53(mm)
ICV 180-68752/27		04/04/2013 18:24	1	00430526.D	RTX-50 0.53(mm)
ICV 180-68752/28		04/04/2013 18:48	1	00430527.D	RTX-50 0.53(mm)
ICV 180-68752/29		04/04/2013 19:13	1	00430528.D	RTX-50 0.53(mm)
ICV 180-68752/30		04/04/2013 19:37	1	00430529.D	RTX-50 0.53(mm)
ICV 180-68752/31		04/04/2013 20:02	1	00430530.D	RTX-50 0.53(mm)
ICV 180-68752/32		04/04/2013 20:27	1	00430531.D	RTX-50 0.53(mm)
CCV 180-68752/33		04/04/2013 23:43	1		RTX-50 0.53(mm)
ZZZZZ		04/05/2013 00:08	1		RTX-50 0.53(mm)
ZZZZZ		04/05/2013 00:32	1		RTX-50 0.53(mm)
ZZZZZ		04/05/2013 00:56	1		RTX-50 0.53(mm)
ZZZZZ		04/05/2013 01:21	1		RTX-50 0.53(mm)
ZZZZZ		04/05/2013 01:46	1		RTX-50 0.53(mm)
ZZZZZ		04/05/2013 02:10	1		RTX-50 0.53(mm)
CCV 180-68752/40		04/05/2013 06:16	1		RTX-50 0.53(mm)

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: CCV 180-70519/7 Calibration Date: 04/22/2013 16:08

Instrument ID: GC8 Calib Start Date: 04/04/2013 15:08

GC Column: RTX-50 ID: 0.53(mm) Calib End Date: 04/04/2013 17:35

Lab File ID: 00431157.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	384590	377356		0.491	0.500	-1.9	20.0
PCB-1016 Peak 2	Ave	126796	124224		0.490	0.500	-2.0	20.0
PCB-1016 Peak 3	Ave	220153	208286		0.473	0.500	-5.4	20.0
PCB-1016 Peak 4	Ave	187046	187500		0.501	0.500	0.2	20.0
PCB-1016 Peak 5	Ave	188111	197490		0.525	0.500	5.0	20.0
PCB-1260 Peak 1	Ave	611103	596792		0.488	0.500	-2.3	20.0
PCB-1260 Peak 2	Ave	681514	648686		0.476	0.500	-4.8	20.0
PCB-1260 Peak 3	Ave	449745	442708		0.492	0.500	-1.6	20.0
PCB-1260 Peak 4	Ave	524455	526660		0.502	0.500	0.4	20.0
PCB-1260 Peak 5	Ave	841618	815682		0.485	0.500	-3.1	20.0
Tetrachloro-m-xylene	Ave	9471938	9752600		0.0257	0.0250	3.0	20.0
DCB Decachlorobiphenyl (Surr)	Ave	4365343	4305960		0.0247	0.0250	-1.4	20.0

<15%

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: CCV 180-70519/7 Calibration Date: 04/22/2013 16:08

Instrument ID: GC8 Calib Start Date: 04/04/2013 15:08

GC Column: RTX-50 ID: 0.53(mm) Calib End Date: 04/04/2013 17:35

Lab File ID: 00431157.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	6.18	6.13	6.19
PCB-1016 Peak 2	6.53	6.49	6.55
PCB-1016 Peak 3	6.66	6.61	6.67
PCB-1016 Peak 4	7.24	7.20	7.26
PCB-1016 Peak 5	7.32	7.28	7.34
PCB-1260 Peak 1	9.14	9.10	9.16
PCB-1260 Peak 2	9.27	9.23	9.29
PCB-1260 Peak 3	9.80	9.76	9.82
PCB-1260 Peak 4	9.87	9.83	9.89
PCB-1260 Peak 5	10.66	10.62	10.68
Tetrachloro-m-xylene	4.35	4.31	4.37
DCB Decachlorobiphenyl (Surr)	14.76	14.70	14.76

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: CCVRT 180-70519/8 Calibration Date: 04/23/2013 17:21

Instrument ID: GC8 Calib Start Date: 04/04/2013 15:08

GC Column: RTX-50 ID: 0.53(mm) Calib End Date: 04/04/2013 17:35

Lab File ID: 00431210.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	384599	367764		0.478	0.500	-4.4	20.0
PCB-1016 Peak 2	Ave	126796	119604		0.472	0.500	-5.7	20.0
PCB-1016 Peak 3	Ave	220153	199878		0.454	0.500	-9.2	20.0
PCB-1016 Peak 4	Ave	187046	190334		0.509	0.500	1.8	20.0
PCB-1016 Peak 5	Ave	188111	189080		0.503	0.500	0.5	20.0
PCB-1260 Peak 1	Ave	611103	577608		0.473	0.500	-5.5	20.0
PCB-1260 Peak 2	Ave	681514	650422		0.477	0.500	-4.6	20.0
PCB-1260 Peak 3	Ave	449745	447346		0.497	0.500	-0.5	20.0
PCB-1260 Peak 4	Ave	524455	517154		0.493	0.500	-1.4	20.0
PCB-1260 Peak 5	Ave	841618	817586		0.486	0.500	-2.9	20.0
Tetrachloro-m-xylene	Ave	9471938	9287760		0.0245	0.0250	-1.9	20.0
DCB Decachlorobiphenyl (Surr)	Ave	4365343	4264240		0.0244	0.0250	-2.3	20.0

<15%

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: CCVRT 180-70519/8 Calibration Date: 04/23/2013 17:21

Instrument ID: GC8 Calib Start Date: 04/04/2013 15:08

GC Column: RTX-50 ID: 0.53(mm) Calib End Date: 04/04/2013 17:35

Lab File ID: O0431210.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	6.18	6.13	6.19
PCB-1016 Peak 2	6.53	6.49	6.55
PCB-1016 Peak 3	6.66	6.61	6.67
PCB-1016 Peak 4	7.24	7.20	7.26
PCB-1016 Peak 5	7.32	7.28	7.34
PCB-1260 Peak 1	9.14	9.10	9.16
PCB-1260 Peak 2	9.27	9.23	9.29
PCB-1260 Peak 3	9.80	9.76	9.82
PCB-1260 Peak 4	9.88	9.83	9.89
PCB-1260 Peak 5	10.67	10.62	10.68
Tetrachloro-m-xylene	4.35	4.31	4.37
DCB Decachlorobiphenyl (Surr)	14.76	14.70	14.76

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: CCV 180-70519/18 Calibration Date: 04/23/2013 23:05

Instrument ID: GC8 Calib Start Date: 04/04/2013 15:08

GC Column: RTX-50 ID: 0.53(mm) Calib End Date: 04/04/2013 17:35

Lab File ID: 00431224.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	384598	371428		0.483	0.500	-3.4	20.0
PCB-1016 Peak 2	Ave	126796	120532		0.475	0.500	-4.9	20.0
PCB-1016 Peak 3	Ave	220153	201310		0.457	0.500	-8.6	20.0
PCB-1016 Peak 4	Ave	187046	183930		0.492	0.500	-1.7	20.0
PCB-1016 Peak 5	Ave	188111	178160		0.474	0.500	-5.3	20.0
PCB-1260 Peak 1	Ave	611103	578956		0.474	0.500	-5.3	20.0
PCB-1260 Peak 2	Ave	681514	657698		0.483	0.500	-3.5	20.0
PCB-1260 Peak 3	Ave	449745	447774		0.498	0.500	-0.4	20.0
PCB-1260 Peak 4	Ave	524455	520630		0.496	0.500	-0.7	20.0
PCB-1260 Peak 5	Ave	841618	842714		0.501	0.500	0.1	20.0
Tetrachloro-m-xylene	Ave	9471938	9579720		0.0253	0.0250	1.1	20.0
DCB Decachlorobiphenyl (Surr)	Ave	4365343	4215160		0.0241	0.0250	-3.4	20.0

<15%

FORM VII 8082A

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: CCV 180-70519/18 Calibration Date: 04/23/2013 23:05

Instrument ID: GC8 Calib Start Date: 04/04/2013 15:08

GC Column: RTX-50 ID: 0.53(mm) Calib End Date: 04/04/2013 17:35

Lab File ID: 00431224.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	6.17	6.13	6.19
PCB-1016 Peak 2	6.53	6.49	6.55
PCB-1016 Peak 3	6.65	6.61	6.67
PCB-1016 Peak 4	7.24	7.20	7.26
PCB-1016 Peak 5	7.31	7.28	7.34
PCB-1260 Peak 1	9.14	9.10	9.16
PCB-1260 Peak 2	9.27	9.23	9.29
PCB-1260 Peak 3	9.79	9.76	9.82
PCB-1260 Peak 4	9.87	9.83	9.89
PCB-1260 Peak 5	10.66	10.62	10.68
Tetrachloro-m-xylene	4.34	4.31	4.37
DCB Decachlorobiphenyl (Surr)	14.75	14.70	14.76

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: CCV 180-70519/19 Calibration Date: 04/24/2013 12:46

Instrument ID: GC8 Calib Start Date: 04/04/2013 15:08

GC Column: RTX-50 ID: 0.53(mm) Calib End Date: 04/04/2013 17:35

Lab File ID: 00431225.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	384598	376196		0.489	0.500	-2.2	20.0
PCB-1016 Peak 2	Ave	126796	124306		0.490	0.500	-2.0	20.0
PCB-1016 Peak 3	Ave	220153	212220		0.482	0.500	-3.6	20.0
PCB-1016 Peak 4	Ave	187046	198266		0.530	0.500	6.0	20.0
PCB-1016 Peak 5	Ave	188111	194960		0.518	0.500	3.6	20.0
PCB-1260 Peak 1	Ave	611103	620558		0.508	0.500	1.5	20.0
PCB-1260 Peak 2	Ave	681514	692052		0.508	0.500	1.5	20.0
PCB-1260 Peak 3	Ave	449745	476756		0.530	0.500	6.0	20.0
PCB-1260 Peak 4	Ave	524455	543448		0.518	0.500	3.6	20.0
PCB-1260 Peak 5	Ave	841618	874992		0.520	0.500	4.0	20.0
Tetrachloro-m-xylene	Ave	9471938	9706920		0.0256	0.0250	2.5	20.0
DCB Decachlorobiphenyl (Surr)	Ave	4365343	4341760		0.0249	0.0250	-0.5	20.0

<15%.

FORM VII 8082A

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: CCV 180-70519/19 Calibration Date: 04/24/2013 12:46

Instrument ID: GC8 Calib Start Date: 04/04/2013 15:08

GC Column: RTX-50 ID: 0.53(mm) Calib End Date: 04/04/2013 17:35

Lab File ID: 00431225.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	6.16	6.13	6.19
PCB-1016 Peak 2	6.51	6.49	6.55
PCB-1016 Peak 3	6.64	6.61	6.67
PCB-1016 Peak 4	7.22	7.20	7.26
PCB-1016 Peak 5	7.30	7.28	7.34
PCB-1260 Peak 1	9.13	9.10	9.16
PCB-1260 Peak 2	9.26	9.23	9.29
PCB-1260 Peak 3	9.78	9.76	9.82
PCB-1260 Peak 4	9.86	9.83	9.89
PCB-1260 Peak 5	10.64	10.62	10.68
Tetrachloro-m-xylene	4.33	4.31	4.37
DCB Decachlorobiphenyl (Surr)	14.72	14.70	14.76

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: CCV 180-70519/24 Calibration Date: 04/24/2013 14:48

Instrument ID: GC8 Calib Start Date: 04/04/2013 15:08

GC Column: RTX-50 ID: 0.53(mm) Calib End Date: 04/04/2013 17:35

Lab File ID: 00431230.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	384598	379590		0.493	0.500	-1.3	20.0
PCB-1016 Peak 2	Ave	126796	122726		0.484	0.500	-3.2	20.0
PCB-1016 Peak 3	Ave	220153	210054		0.477	0.500	-4.6	20.0
PCB-1016 Peak 4	Ave	187046	196186		0.524	0.500	4.9	20.0
PCB-1016 Peak 5	Ave	188111	200682		0.533	0.500	6.7	20.0
PCB-1260 Peak 1	Ave	611103	598216		0.489	0.500	-2.1	20.0
PCB-1260 Peak 2	Ave	681514	655546		0.481	0.500	-3.8	20.0
PCB-1260 Peak 3	Ave	449745	445879		0.496	0.500	-0.9	20.0
PCB-1260 Peak 4	Ave	524455	528410		0.504	0.500	0.8	20.0
PCB-1260 Peak 5	Ave	841618	831336		0.494	0.500	-1.2	20.0
Tetrachloro-m-xylene	Ave	9471938	9583240		0.0253	0.0250	1.2	20.0
DCB Decachlorobiphenyl (Surr)	Ave	4365343	4398240		0.0252	0.0250	0.8	20.0

<15%.

FORM VII 8082A

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Lab Sample ID: CCV 180-70519/24 Calibration Date: 04/24/2013 14:48

Instrument ID: GC8 Calib Start Date: 04/04/2013 15:08

GC Column: RTX-50 ID: 0.53(mm) Calib End Date: 04/04/2013 17:35

Lab File ID: 00431230.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	6.16	6.13	6.19
PCB-1016 Peak 2	6.52	6.49	6.55
PCB-1016 Peak 3	6.64	6.61	6.67
PCB-1016 Peak 4	7.23	7.20	7.26
PCB-1016 Peak 5	7.31	7.28	7.34
PCB-1260 Peak 1	9.13	9.10	9.16
PCB-1260 Peak 2	9.26	9.23	9.29
PCB-1260 Peak 3	9.79	9.76	9.82
PCB-1260 Peak 4	9.86	9.83	9.89
PCB-1260 Peak 5	10.65	10.62	10.68
Tetrachloro-m-xylene	4.34	4.31	4.37
DCB Decachlorobiphenyl (Surr)	14.73	14.70	14.76

FORM VIII
GC SEMI VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Sample No.: CCVRT 180-70519/8 Date Analyzed: 04/23/2013 17:21

Instrument ID: GC8 GC Column: RTX-50 ID: 0.53(mm)

Lab File ID (Standard): 00431210.D Heated Purge: (Y/N) N

Calibration ID: 9168

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				4.35	14.76	
UPPER LIMIT				4.40	14.81	
LOWER LIMIT				4.30	14.71	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 180-70519/8		04/23/2013 17:21	00431210.D	4.35	14.76	
180-20360-1	MB-MW-01-20130410	04/23/2013 17:46	00431211.D	4.35	14.77	
180-20360-4	MB-MW-04-20130410	04/23/2013 19:49	00431216.D	4.35	14.75	
180-20360-5	MB-MW-05-20130411	04/23/2013 20:13	00431217.D	4.35	14.75	
180-20360-6	MB-MW-06-20130411	04/23/2013 20:38	00431218.D	4.35	14.75	
180-20360-7	DUP-20130410	04/23/2013 21:02	00431219.D	4.35	14.75	
180-20360-8	MB-FB-20130410	04/23/2013 21:27	00431220.D	4.35	14.75	
180-20360-9	MB-FB-20130411	04/23/2013 21:51	00431221.D	4.35	14.75	
MB 180-69224/1-C		04/23/2013 22:16	00431222.D	4.34	14.74	
LCS 180-69224/2-C		04/23/2013 22:41	00431223.D	4.35	14.74	
CCV 180-70519/18		04/23/2013 23:05	00431224.D	4.34	14.75	
CCV 180-70519/19		04/24/2013 12:46	00431225.D	4.33	14.72	
180-20360-2	MB-MW-02-20130410	04/24/2013 13:11	00431226.D	4.33	14.72	
180-20360-2 MS	MB-MW-02-20130410 MS	04/24/2013 13:35	00431227.D	4.33	14.72	
180-20360-2 MSD	MB-MW-02-20130410 MSD	04/24/2013 13:59	00431228.D	4.33	14.73	
180-20360-3	MB-MW-03-20130410	04/24/2013 14:23	00431229.D	4.34	14.72	
CCV 180-70519/24		04/24/2013 14:48	00431230.D	4.34	14.73	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl (Surr)

TCX RT Limit = ± 0.05 minutes of surrogate RT
DCB RT Limit = ± 0.05 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8082A

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Instrument ID: GC8 Start Date: 04/22/2013 13:41

Analysis Batch Number: 70519 End Date: 04/24/2013 14:48

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 180-70519/1		04/22/2013 13:41	1	00431151.D	RTX-50 0.53(mm)
CCV 180-70519/2		04/22/2013 14:05	1	00431152.D	RTX-50 0.53(mm)
CCV 180-70519/3		04/22/2013 14:30	1	00431153.D	RTX-50 0.53(mm)
CCV 180-70519/4		04/22/2013 14:55	1	00431154.D	RTX-50 0.53(mm)
CCV 180-70519/5		04/22/2013 15:19	1	00431155.D	RTX-50 0.53(mm)
CCV 180-70519/6		04/22/2013 15:44	1	00431156.D	RTX-50 0.53(mm)
CCV 180-70519/7		04/22/2013 16:08	1	00431157.D	RTX-50 0.53(mm)
CCVRT 180-70519/8		04/23/2013 17:21	1	00431210.D	RTX-50 0.53(mm)
180-20360-1	MB-MW-01-20130410	04/23/2013 17:46	1	00431211.D	RTX-50 0.53(mm)
180-20360-4	MB-MW-04-20130410	04/23/2013 19:49	1	00431216.D	RTX-50 0.53(mm)
180-20360-5	MB-MW-05-20130411	04/23/2013 20:13	1	00431217.D	RTX-50 0.53(mm)
180-20360-6	MB-MW-06-20130411	04/23/2013 20:38	1	00431218.D	RTX-50 0.53(mm)
180-20360-7	DUP-20130410	04/23/2013 21:02	1	00431219.D	RTX-50 0.53(mm)
180-20360-8	MB-FB-20130410	04/23/2013 21:27	1	00431220.D	RTX-50 0.53(mm)
180-20360-9	MB-FB-20130411	04/23/2013 21:51	1	00431221.D	RTX-50 0.53(mm)
MB 180-69224/1-C		04/23/2013 22:16	1	00431222.D	RTX-50 0.53(mm)
LCS 180-69224/2-C		04/23/2013 22:41	1	00431223.D	RTX-50 0.53(mm)
CCV 180-70519/18		04/23/2013 23:05	1	00431224.D	RTX-50 0.53(mm)
CCV 180-70519/19		04/24/2013 12:46	1	00431225.D	RTX-50 0.53(mm)
180-20360-2	MB-MW-02-20130410	04/24/2013 13:11	1	00431226.D	RTX-50 0.53(mm)
180-20360-2 MS	MB-MW-02-20130410 MS	04/24/2013 13:35	1	00431227.D	RTX-50 0.53(mm)
180-20360-2 MSD	MB-MW-02-20130410 MSD	04/24/2013 13:59	1	00431228.D	RTX-50 0.53(mm)
180-20360-3	MB-MW-03-20130410	04/24/2013 14:23	1	00431229.D	RTX-50 0.53(mm)
CCV 180-70519/24		04/24/2013 14:48	1	00431230.D	RTX-50 0.53(mm)

8082A

GC SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Batch Number: 69224 Batch Start Date: 04/16/13 07:56 Batch Analyst: Pino, Brian

Batch Method: 3510C Batch End Date: 04/16/13 10:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	ReceivedpH	InitialAmount	FinalAmount	GCMATRIXWORKS 00006	op-p/pcb sur 00008	
MB 180-69224/1		3510C, 3660B, 3665A, 8082A		6	1000 mL	1.0 mL		0.025 mL	
LCS 180-69224/2		3510C, 3660B, 3665A, 8082A		6	1000 mL	1.0 mL	0.025 mL	0.025 mL	
180-20360-C-2 MS	MB-MW-02-20130410	3510C, 3660B, 3665A, 8082A	T	7	1000 mL	1.0 mL	0.025 mL	0.025 mL	
180-20360-D-2 MSD	MB-MW-02-20130410	3510C, 3660B, 3665A, 8082A	T	7	980 mL	1.0 mL	0.025 mL	0.025 mL	
180-20360-C-1	MB-MW-01-20130410	3510C, 3660B, 3665A, 8082A	T	7	960 mL	1.0 mL		0.025 mL	
180-20360-C-2	MB-MW-02-20130410	3510C, 3660B, 3665A, 8082A	T	7	990 mL	1.0 mL		0.025 mL	
180-20360-D-3	MB-MW-03-20130410	3510C, 3660B, 3665A, 8082A	T	7	890 mL	1.0 mL		0.025 mL	
180-20360-C-4	MB-MW-04-20130410	3510C, 3660B, 3665A, 8082A	T	7	960 mL	1.0 mL		0.025 mL	
180-20360-C-5	MB-MW-05-20130411	3510C, 3660B, 3665A, 8082A	T	7	930 mL	1.0 mL		0.025 mL	
180-20360-D-6	MB-MW-06-20130411	3510C, 3660B, 3665A, 8082A	T	7	950 mL	1.0 mL		0.025 mL	
180-20360-A-7	DUP-20130410	3510C, 3660B, 3665A, 8082A	T	7	930 mL	1.0 mL		0.025 mL	
180-20360-C-8	MB-FB-20130410	3510C, 3660B, 3665A, 8082A	T	6	990 mL	1.0 mL		0.025 mL	
180-20360-B-9	MB-FB-20130411	3510C, 3660B, 3665A, 8082A	T	6	920 mL	1.0 mL		0.025 mL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Batch Number: 69224 Batch Start Date: 04/16/13 07:56 Batch Analyst: Pino, Brian

Batch Method: 3510C Batch End Date: 04/16/13 10:30

Batch Notes	
Batch Comment	Ph paper HC256691
Person's name who did the concentration	JM BP
Exchange Solvent Lot #	774672
Exchange Solvent Name	Hexane
N-evap #	1
Na2SO4 Lot Number	793448
Prep Solvent Lot #	787578
Prep Solvent Name	Methylene chloride
Prep Solvent Volume Used	180 mL
Person's name who did the prep	BP JM
Sufficient volume for MS/MSD?	YES
Uncorrected N-evap Temperature	30 Celsius
Uncorrected Temperature	80 Celsius

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Batch Number: 69524 Batch Start Date: 04/18/13 11:04 Batch Analyst: Oravec, John

Batch Method: 3660B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	GCTBASOLUTION 00009			
MB 180-69224/1-A		3660B, 3665A, 8082A		1 mL	1 mL	2 mL			
LCS 180-69224/2-A		3660B, 3665A, 8082A		1 mL	1 mL	2 mL			
180-20360-C-2-A MS	MB-MW-02-20130410	3660B, 3665A, 8082A	T	1 mL	1 mL	2 mL			
180-20360-D-2-A MSD	MB-MW-02-20130410	3660B, 3665A, 8082A	T	1 mL	1 mL	2 mL			
180-20360-C-1-A	MB-MW-01-20130410	3660B, 3665A, 8082A	T	1 mL	1 mL	2 mL			
180-20360-C-2-B	MB-MW-02-20130410	3660B, 3665A, 8082A	T	1 mL	1 mL	2 mL			
180-20360-D-3-A	MB-MW-03-20130410	3660B, 3665A, 8082A	T	1 mL	1 mL	2 mL			
180-20360-C-4-A	MB-MW-04-20130410	3660B, 3665A, 8082A	T	1 mL	1 mL	2 mL			
180-20360-C-5-A	MB-MW-05-20130411	3660B, 3665A, 8082A	T	1 mL	1 mL	2 mL			
180-20360-D-6-A	MB-MW-06-20130411	3660B, 3665A, 8082A	T	1 mL	1 mL	2 mL			
180-20360-A-7-A	DUP-20130410	3660B, 3665A, 8082A	T	1 mL	1 mL	2 mL			
180-20360-C-8-A	MB-FB-20130410	3660B, 3665A, 8082A	T	1 mL	1 mL	2 mL			
180-20360-B-9-A	MB-FB-20130411	3660B, 3665A, 8082A	T	1 mL	1 mL	2 mL			

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-20360-1

SDG No.:

Batch Number: 69525 Batch Start Date: 04/18/13 11:06 Batch Analyst: Oravec, John

Batch Method: 3665A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
MB 180-69224/1-B		3665A, 8082A		1 mL	1 mL				
LCS 180-69224/2-B		3665A, 8082A		1 mL	1 mL				
180-20360-C-2-C MS	MB-MW-02-20130410	3665A, 8082A	T	1 mL	1 mL				
180-20360-D-2-C MSD	MB-MW-02-20130410	3665A, 8082A	T	1 mL	1 mL				
180-20360-C-1-B	MB-MW-01-20130410	3665A, 8082A	T	1 mL	1 mL				
180-20360-C-2-D	MB-MW-02-20130410	3665A, 8082A	T	1 mL	1 mL				
180-20360-D-3-B	MB-MW-03-20130410	3665A, 8082A	T	1 mL	1 mL				
180-20360-C-4-B	MB-MW-04-20130410	3665A, 8082A	T	1 mL	1 mL				
180-20360-C-5-B	MB-MW-05-20130411	3665A, 8082A	T	1 mL	1 mL				
180-20360-D-6-B	MB-MW-06-20130411	3665A, 8082A	T	1 mL	1 mL				
180-20360-A-7-B	DUP-20130410	3665A, 8082A	T	1 mL	1 mL				
180-20360-C-8-B	MB-FB-20130410	3665A, 8082A	T	1 mL	1 mL				
180-20360-B-9-B	MB-FB-20130411	3665A, 8082A	T	1 mL	1 mL				

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

SECTION 4

CASE NARRATIVE AND PROJECT CHAIN-OF-CUSTODY RECORD

CASE NARRATIVE

Client: ENVIRON International Corp.

Project: Metal Bank Site

Report Number: 180-20360-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 4/13/2013 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 6 coolers at receipt time were 3.1° C, 3.7° C, 4.6° C, 4.7° C, 4.8° C and 5.2° C.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Several analytes failed the recovery criteria low for the MS and MSD of sample MB-MW-02-20130410MS (180-20360-2) in batch 180-69484.

Several analytes failed the recovery criteria low for the MSD of sample MB-MW-02-20130410MSD (180-20360-2) in batch 180-69484.

Refer to the QC report for details.

DATA REPORTING QUALIFIERS

Client: ENVIRON International Corp. Job Number: 180-20360-1

Lab Section	Qualifier	Description
GC/MS Semi VOA		
	F	MS or MSD exceeds the control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
GC Semi VOA		
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

4.1, 5.2, 3.7, 3.1, 4.8, 4.6 #2

estAmerica King of Prussia
1008 W Ninth Ave
King of Prussia, PA 19406
Phone (610) 337-9942 Fax (610) 337-9939

180-20360 Chain of Custody

Chain of Custody Record

Client Information	Lab PM: Danek, John M	Carrier Tracking No(s):	COC No: 180-11446-2240.1
Client Contact: Jessica Penetar	E-Mail: john.danek@testamericainc.com		Page: Page 1 of 2
Company: ENVIRON International Corp.			Job #:

Address: 214 Carnegie Center Suite 200	Due Date Requested:	Analysis Requested
City: Princeton	TAT Requested (days): Standard	
State, Zip: NJ, 08540	PO #: 33-26374H	
Phone: 609-452-9000(Tel)	WO #:	
Email: Jpenetar@environcorp.com	Project #: 18009743	
Project Name: Metal Bank Site	SSOW#:	
Site:		

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	TCL PCBs Low Level 8082A	8270D - TCL 4.2 GC/MS	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
MB-MW-01-20130410	4/10/13	1237		Water			X	X	4	
MB-MW-02-20130410	4/10/13	1100		Water			X	X	4	
MB-MW-02-MS-20130410	4/10/13	1100		Water		X	X	X	4	
MB-MW-02-MSD-20130410	4/10/13	1100		Water		X	X	X	4	
MB-MW-03-20130410	4/10/13	1512		Water			X	X	4	
MB-MW-04-20130410	4/10/13	1637		Water			X	X	4	
MB-MW-05-20130411	4/11/13	11:15		Water			X	X	4	
MB-MW-06-20130411	4/11/13	903		Water			X	X	4	
DUP-20130410	4/10/13	1637		Water			X	X	4	
MB-FB-20130410	4/10/13	1455		Water			X	X	4	
MB-FB-20130411	4/11/13	917		Water			X	X	4	

SHIP TO PITTSBURG

Page 541 of 542

** Does not match EDD

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Erin Mayfield	Date/Time: 4/12/13	Company: ENVIRON	Received by:	Date/Time: 4/12/13	Company
Relinquished by:	Date/Time: 4/13/13	Company: 700	Received by: FedEx	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 4-13-13 930	Company DAT

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

SAMPLE SUMMARY

Client: ENVIRON International Corp.

Job Number: 180-20360-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
180-20360-1	MB-MW-01-20130410	Water	04/10/2013 1237	04/13/2013 0930
180-20360-2	MB-MW-02-20130410	Water	04/10/2013 1100	04/13/2013 0930
180-20360-2MS	MB-MW-02-20130410	Water	04/10/2013 1100	04/13/2013 0930
180-20360-2MSD	MB-MW-02-20130410	Water	04/10/2013 1100	04/13/2013 0930
180-20360-3	MB-MW-03-20130410	Water	04/10/2013 1512	04/13/2013 0930
180-20360-4	MB-MW-04-20130410	Water	04/10/2013 1637	04/13/2013 0930
180-20360-5	MB-MW-05-20130411	Water	04/11/2013 1115	04/13/2013 0930
180-20360-6	MB-MW-06-20130411	Water	04/11/2013 0903	04/13/2013 0930
180-20360-7	DUP-20130410	Water	04/10/2013 1637	04/13/2013 0930
180-20360-8	MB-FB-20130410	Water	04/10/2013 1455	04/13/2013 0930
180-20360-9	MB-FB-20130411	Water	04/11/2013 0917	04/13/2013 0930

Client: ENVIRON International Corp. Job Number: 180-20360-1

Laboratory Chronicle

Lab ID: 180-20360-1 **Client ID:** MB-MW-01-20130410

Sample Date/Time: 04/10/2013 12:37 Received Date/Time: 04/13/2013 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-20360-B-1-A		180-69484	180-69228	04/16/2013 08:04	1	TAL PIT	BT
A:8270D	180-20360-B-1-A		180-69484	180-69228	04/17/2013 17:44	1	TAL PIT	VP
P:3510C	180-20360-C-1-C		180-70519	180-69224	04/16/2013 07:56	1	TAL PIT	BP
A:8082A	180-20360-C-1-C		180-70519	180-69224	04/23/2013 17:46	1	TAL PIT	AG

Lab ID: 180-20360-2 **Client ID:** MB-MW-02-20130410

Sample Date/Time: 04/10/2013 11:00 Received Date/Time: 04/13/2013 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-20360-B-2-B		180-69484	180-69228	04/16/2013 08:04	1	TAL PIT	BT
A:8270D	180-20360-B-2-B		180-69484	180-69228	04/17/2013 18:12	1	TAL PIT	VP
P:3510C	180-20360-C-2-F		180-70519	180-69224	04/16/2013 07:56	1	TAL PIT	BP
A:8082A	180-20360-C-2-F		180-70519	180-69224	04/24/2013 13:11	1	TAL PIT	AG

Lab ID: 180-20360-2 **Client ID:** MB-MW-02-20130410

Sample Date/Time: 04/10/2013 11:00 Received Date/Time: 04/13/2013 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-20360-D-2-B MS		180-69484	180-69228	04/16/2013 08:04	1	TAL PIT	BT
A:8270D	180-20360-D-2-B MS		180-69484	180-69228	04/17/2013 18:40	1	TAL PIT	VP
P:3510C	180-20360-C-2-E MS		180-70519	180-69224	04/16/2013 07:56	1	TAL PIT	BP
A:8082A	180-20360-C-2-E MS		180-70519	180-69224	04/24/2013 13:35	1	TAL PIT	AG

Lab ID: 180-20360-2 **Client ID:** MB-MW-02-20130410

Sample Date/Time: 04/10/2013 11:00 Received Date/Time: 04/13/2013 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-20360-B-2-A MSD		180-69484	180-69228	04/16/2013 08:04	1	TAL PIT	BT
A:8270D	180-20360-B-2-A MSD		180-69484	180-69228	04/17/2013 19:08	1	TAL PIT	VP
P:3510C	180-20360-D-2-D MSD		180-70519	180-69224	04/16/2013 07:56	1	TAL PIT	BP
A:8082A	180-20360-D-2-D MSD		180-70519	180-69224	04/24/2013 13:59	1	TAL PIT	AG

Client: ENVIRON International Corp. Job Number: 180-20360-1

Laboratory Chronicle

Lab ID: 180-20360-3 **Client ID:** MB-MW-03-20130410

Sample Date/Time: 04/10/2013 15:12 Received Date/Time: 04/13/2013 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-20360-B-3-A		180-69484	180-69228	04/16/2013 08:04	1	TAL PIT	BT
A:8270D	180-20360-B-3-A		180-69484	180-69228	04/17/2013 19:36	1	TAL PIT	VP
P:3510C	180-20360-D-3-C		180-70519	180-69224	04/16/2013 07:56	1	TAL PIT	BP
A:8082A	180-20360-D-3-C		180-70519	180-69224	04/24/2013 14:23	1	TAL PIT	AG

Lab ID: 180-20360-4 **Client ID:** MB-MW-04-20130410

Sample Date/Time: 04/10/2013 16:37 Received Date/Time: 04/13/2013 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-20360-D-4-A		180-69484	180-69228	04/16/2013 08:04	1	TAL PIT	BT
A:8270D	180-20360-D-4-A		180-69484	180-69228	04/17/2013 20:04	1	TAL PIT	VP
P:3510C	180-20360-C-4-C		180-70519	180-69224	04/16/2013 07:56	1	TAL PIT	BP
A:8082A	180-20360-C-4-C		180-70519	180-69224	04/23/2013 19:49	1	TAL PIT	AG

Lab ID: 180-20360-5 **Client ID:** MB-MW-05-20130411

Sample Date/Time: 04/11/2013 11:15 Received Date/Time: 04/13/2013 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-20360-A-5-A		180-69484	180-69228	04/16/2013 08:04	1	TAL PIT	BT
A:8270D	180-20360-A-5-A		180-69484	180-69228	04/17/2013 20:32	1	TAL PIT	VP
P:3510C	180-20360-C-5-C		180-70519	180-69224	04/16/2013 07:56	1	TAL PIT	BP
A:8082A	180-20360-C-5-C		180-70519	180-69224	04/23/2013 20:13	1	TAL PIT	AG

Lab ID: 180-20360-6 **Client ID:** MB-MW-06-20130411

Sample Date/Time: 04/11/2013 09:03 Received Date/Time: 04/13/2013 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-20360-C-6-A		180-69484	180-69228	04/16/2013 08:04	1	TAL PIT	BT
A:8270D	180-20360-C-6-A		180-69484	180-69228	04/17/2013 21:00	1	TAL PIT	VP
P:3510C	180-20360-D-6-C		180-70519	180-69224	04/16/2013 07:56	1	TAL PIT	BP
A:8082A	180-20360-D-6-C		180-70519	180-69224	04/23/2013 20:38	1	TAL PIT	AG

Lab ID: 180-20360-7 **Client ID:** DUP-20130410

Sample Date/Time: 04/10/2013 16:37 Received Date/Time: 04/13/2013 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-20360-B-7-A		180-69484	180-69228	04/16/2013 08:04	1	TAL PIT	BT
A:8270D	180-20360-B-7-A		180-69484	180-69228	04/17/2013 21:28	1	TAL PIT	VP
P:3510C	180-20360-A-7-C		180-70519	180-69224	04/16/2013 07:56	1	TAL PIT	BP
A:8082A	180-20360-A-7-C		180-70519	180-69224	04/23/2013 21:02	1	TAL PIT	AG

Client: ENVIRON International Corp. Job Number: 180-20360-1

Laboratory Chronicle

Lab ID: 180-20360-8 **Client ID:** MB-FB-20130410

Sample Date/Time: 04/10/2013 14:55 Received Date/Time: 04/13/2013 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-20360-D-8-A		180-69484	180-69228	04/16/2013 08:04	1	TAL PIT	BT
A:8270D	180-20360-D-8-A		180-69484	180-69228	04/17/2013 21:56	1	TAL PIT	VP
P:3510C	180-20360-C-8-C		180-70519	180-69224	04/16/2013 07:56	1	TAL PIT	BP
A:8082A	180-20360-C-8-C		180-70519	180-69224	04/23/2013 21:27	1	TAL PIT	AG

Lab ID: 180-20360-9 **Client ID:** MB-FB-20130411

Sample Date/Time: 04/11/2013 09:17 Received Date/Time: 04/13/2013 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-20360-D-9-A		180-69484	180-69228	04/16/2013 08:04	1	TAL PIT	BT
A:8270D	180-20360-D-9-A		180-69484	180-69228	04/17/2013 22:24	1	TAL PIT	VP
P:3510C	180-20360-B-9-C		180-70519	180-69224	04/16/2013 07:56	1	TAL PIT	BP
A:8082A	180-20360-B-9-C		180-70519	180-69224	04/23/2013 21:51	1	TAL PIT	AG

Lab ID: MB **Client ID:** N/A

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	MB 180-69228/1-A		180-69484	180-69228	04/16/2013 08:04	1	TAL PIT	BT
A:8270D	MB 180-69228/1-A		180-69484	180-69228	04/17/2013 12:11	1	TAL PIT	VP
P:3510C	MB 180-69224/1-C		180-70519	180-69224	04/16/2013 07:56	1	TAL PIT	BP
A:8082A	MB 180-69224/1-C		180-70519	180-69224	04/23/2013 22:16	1	TAL PIT	AG

Lab ID: LCS **Client ID:** N/A

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	LCS 180-69228/2-A		180-69484	180-69228	04/16/2013 08:04	1	TAL PIT	BT
A:8270D	LCS 180-69228/2-A		180-69484	180-69228	04/17/2013 14:29	1	TAL PIT	VP
P:3510C	LCS 180-69224/2-C		180-70519	180-69224	04/16/2013 07:56	1	TAL PIT	BP
A:8082A	LCS 180-69224/2-C		180-70519	180-69224	04/23/2013 22:41	1	TAL PIT	AG

Lab References:
TAL PIT = TestAmerica Pittsburgh

SECTION 5

PROJECT CORRESPONDENCE

Diana Chan

From: Jessica Penetar <jpenetar@environcorp.com>
Sent: Monday, June 03, 2013 4:45 PM
To: Steve Zeiner
Cc: Diana Chan
Subject: FW: Files from 180-20360-1 Metal Bank Site
Attachments: J20360-1 Std_Tal_L4_Package_Mini Rev(1) Final Report.pdf; 180203601_EFWEDD.zip

Hi Steve,
Please see the email and revised report from Test America. I briefly looked at this new report and it seems to have a few more pages included in the SVOC section than the old one.

He also sent revised EDDs. I have attached them as well. Do you need us to process them or can you complete the review without them?

Thank you.

ENVIRON

Jessica Penetar, E.I.T. | Senior Associate
ENVIRON International Corporation
8 East Broadway, Suite 320 | Salt Lake City, UT 84111
T: +1 385 282 5312 | F: +1 385 282 5304 | M: +1 609 227 1195
jpenetar@environcorp.com

From: Danek, John [mailto:john.danek@testamericainc.com]
Sent: Monday, June 03, 2013 2:31 PM
To: Jessica Penetar
Subject: Files from 180-20360-1 Metal Bank Site

Jessica,

the ICV's have been Linked

Thanks you

John

JOHN M DANEK

TestAmerica Pittsburgh
THE LEADER IN ENVIRONMENTAL TESTING

Tel: 412.963.2453
www.testamericainc.com

Reference: [062667]
Attachments: 1

Diana Chan

From: Steve Zeiner
Sent: Friday, May 31, 2013 2:42 PM
To: Jessica Penetar
Cc: Diana Chan
Subject: Data Request Job Number 180-20360-1 for Environ Metal Banks

Follow Up Flag: Follow up
Flag Status: Flagged

Jessica,
Based on the completeness review, the chemist reviewing the data package noted that the following information is needed. If any addition issues are observed during the results verification, you will be notified.

For Method 8270D, please have TestAmerica provide the summary forms and raw data for the initial calibration verification standards ICV 180-68226/10 run on 4/30/2013 10:06 and ICV 180-68226/11 run on 4/30/2013 10:42.

Regards - Steve

Stephen T. Zeiner, CEAC
Senior Technical Chemist
Environmental Standards, Inc.
1140 Valley Forge Road • P.O. Box 810 • Valley Forge, PA 19482
610.935.5577 • Fax: 610.935.5583 • www.envstd.com • szeiner@envstd.com

Emergency Response Quality Assurance Hotline: 855.374.7272

ENVIRONMENTAL® STANDARDS

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November 19, 2013

Ms. Jessica Penetar
ENVIRON International Corporation
8 East Broadway, Suite 320
Salt Lake City, UT 84111

Dear Ms. Penetar:

Enclosed is the quality assurance review of the analytical data for the aqueous samples collected on October 9 and 10, 2013, at the Metal Bank Superfund Site. Based on this quality assurance review, the result for 3,3′-dichlorobenzidine in one sample was qualified as unusable due to very low matrix spike/matrix spike duplicate recoveries. A portion of the organic data was qualified as estimated due to field duplicate precision, low matrix spike/matrix spike duplicate recoveries, a low surrogate recovery, and reported positive results between the method detection limit and reporting limit. Overall, the data are usable with the qualification presented in this review.

If you have any questions or comments, or if we can be of any further assistance, please feel free to call.

Sincerely,

Stephen T. Zeiner, CEAC
Senior Technical Chemist

Sincerely,

Rock J. Vitale, CEAC
Technical Director of Chemistry/
Principal

STZ/RJV:sc
Enc.

1140 Valley Forge Road P.O. Box 810 Valley Forge, PA 19482 Tel: 610.935.5577 Fax: 610.935.5583 Web: www.envstd.com

ENVIRONMENTAL® STANDARDS

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QUALITY ASSURANCE REVIEW OF THE AQUEOUS SAMPLES COLLECTED ON OCTOBER 9 AND 10, 2013 FOR METAL BANK SUPERFUND SITE

November 19, 2013

Prepared for:

ENVIRON INTERNATIONAL CORPORATION
8 East Broadway, Suite 320
Salt Lake City, UT 84111

Prepared by:

ENVIRONMENTAL STANDARDS, INC.
1140 Valley Forge Road
P.O. Box 810
Valley Forge, PA 19482-0810

TABLE OF CONTENTS

Introduction

This quality assurance (QA) review is based upon an examination of the organic data generated from the analyses of the aqueous samples collected on October 9 and 10, 2013, at the Metal Bank Superfund Site. The samples included in this QA review are presented on Table 1. The laboratory was requested to prepare a detailed data package to substantiate the reported analytical results. The data package that was prepared allowed for a comprehensive review to be performed.

This review has been performed with the guidance from the US EPA "Innovative Approaches to Data Validation" (Region III, June 1995) Level M3 data validation; the "US EPA Contract Laboratory Program National Functional Guidelines for Organic Data Review" (US EPA, October 1999); and the "Metal Bank National Priority Site Quality Assurance Project Plan Groundwater" (QAPP, May 2010).

The reported analytical results are presented in Section 2. Data were examined to determine the usability of the analytical results and compliance relative to the analytical requirements specified by US EPA and "Test Methods for Evaluating Solid Waste Physical/Chemical Methods," SW-846, 3rd Edition (SW-846) methodology. Qualifier codes have been placed next to the results to enable the data user to quickly assess the qualitative and/or quantitative reliability of any result. Details of this QA review are presented in Section 1 of this report. This report was prepared to provide a critical review of the laboratory analyses and reported analytical results. Rigorous QA reviews of laboratory-generated data routinely identify various problems associated with analytical measurements, even from the most experienced and capable laboratories. The nature and extent of problems identified in this critical review should not be interpreted to mean that those results that do not have qualifier codes are less than valid.

TABLE 1

SAMPLES THAT HAVE UNDERGONE A RIGOROUS

QUALITY ASSURANCE REVIEW

Client Sample Identification	Laboratory Sample Identification	Matrix	Date Sample Collected	Parameters Examined
MB-MW-02-20131009	180-26012-1	Aq	10/9/13	SVOA, PCB
MB-MW-02-20131009MS (Matrix Spike)	180-26012-1MS	Aq	10/9/13	SVOA, PCB
MB-MW-02-20131009MSD (Matrix Spike Duplicate)	180-26012-1MSD	Aq	10/9/13	SVOA, PCB
MB-MW-01-20131009	180-26012-2	Aq	10/9/13	SVOA, PCB
MB-MW-03-20131009	180-26012-3	Aq	10/9/13	SVOA, PCB
MB-EB-20131009 (Equipment Blank)	180-26012-4	Aq	10/9/13	SVOA, PCB
MB-MW-04-20131009	180-26012-5	Aq	10/9/13	SVOA, PCB
MB-MW-06-20131010	180-26012-6	Aq	10/10/13	SVOA, PCB
DUP-20131009 (Field Duplicate of MB-MW-04-20131009)	180-26012-7	Aq	10/9/13	SVOA, PCB
MB-MW-05-20131010	180-26012-8	Aq	10/10/13	SVOA, PCB
MB-EB-20131010 (Equipment Blank)	180-26012-9	Aq	10/10/13	SVOA, PCB

NOTES:

PCB - PCBs as Aroclors by SW-846 Method 8082A. (11 analyses)
SVOA - Semivolatile Organic Compounds by SW-846 Method 8270D. (11 analyses)
Aq - Aqueous.

Section 1 Quality Assurance Review

A. Organic Data

The organic analyses of 11 aqueous samples (including equipment blanks and quality control [QC] samples) were performed by TestAmerica Laboratories, Inc. in Pittsburgh, Pennsylvania (TestAmerica Pittsburgh). All samples were analyzed for PCBs as Aroclors by SW-846 Method 8082A and for semivolatile organic compounds by SW-846 Method 8270D. The analyses are specified on Table 1 and the analytical results are summarized in Section 2 of this report.

The findings offered in this report are based on a review of the holding times, condition of samples upon laboratory receipt, gas chromatogram/mass spectral (GC/MS) tuning and system performance, laboratory and field generated blank analysis results, surrogate recoveries, laboratory control/laboratory control duplicate samples (LCS/LCSD) recoveries and precision, matrix spike/matrix spike duplicate (MS/MSD) recovery and precision, field duplicate precision, initial calibrations, initial calibration verification (ICV) standard, continuing calibration verification (CCV) standards, qualitative identification, and the quantitation of positive results.

Issues are typically presented in two categories – deliverable issues and procedural issues. Deliverable issues are data issues that can easily be corrected and that may or may not impact the usability of the reported results. Procedural issues are issues that cannot be corrected and address method compliance issues; these issue may or may not impact the usability of the reported results. The data reviewer has included copies of relevant raw data, QC forms, and other documentation need to support any changes made to the data package in the Organic Data Support Documentation (Section 3) of this report.

Deliverable Review

1. In the data package, the laboratory identified the MSD as "MB-MW-02-20130410." According to the Chain-of-Custody (COC) Record, the laboratory should have identified the sample as "MB-MW-02-MSD-20130410." Qualification of data was not warranted due to this issue.

2. In the semivolatile organic fraction, the laboratory did not report the concentrations for the caprolactam and *bis*(2-ethylhexyl)phthalate in the CCV on the GC/MS Semi VOA Continuing Calibration Data summary forms. The data validator utilized the results in the raw data to confirm the reported percent differences (%D) on the summary forms. Qualification of data was not warranted due to this issue.

Procedural Review

- The recoveries of Aroclor-1016 and Aroclor-1260 in the LCS analysis were above the laboratory acceptance limits. Positive results for Aroclor compounds were observed in samples MB-MW-04-20131009 and MB-MW-06-20131010. The LCS for the Aroclor analysis is spiked with Aroclor-1016 and Aroclor-1260 only and these two Aroclors are intended to represent the entire target analyte list with regard to extraction performance.

According to SW-846 Method 8000B (Section 8.7.4) and QAPP Worksheet #28-4, if the LCS recoveries are outside of the acceptance limits, the associated samples should be re-prepared and reanalyzed. The laboratory did not initiate correct action. Qualification of data due to high LCS recoveries is addressed in the subsequent Data Usability Review section.

With regard to data usability, the principal areas of concern are surrogate recoveries, field duplicate precision, MS/MSD recoveries, total results and reported positive results between the method detection limit (MDL) and reporting limit (RL). Based upon a rigorous review of the data package provided, the following organic data qualifiers are offered. The following data usability issues represent an interpretation of the QC results obtained for the project samples. Quite often, data qualifications address issues relating to sample matrix problems. Similarly, the data validation guidelines routinely specify areas of the data that require qualification, yet the methods used for analysis may not require corrective action by the laboratory. Accordingly, the following data usability issues should not be construed as an indication of laboratory performance.

Data Usability Review

- The analysis for 3,3′-dichlorobenzidine in sample MB-MW-02-20131009 should be considered unusable, and the "not-detected" results have been flagged "R" on the data tables. Very low recoveries (< 10%) were observed for 3,3′-dichlorobenzidine in the associated MS/MSD analyses.

- The reported positive result for diethyl phthalate in sample MB-MW-02-20131009 should be considered bias low and has been flagged "L" on the data tables. Low recoveries (< the lower laboratory acceptance limits) were observed for diethyl phthalate in the associated MS/MSD analyses.

- The reported positive results for Aroclor-1242 in samples MB-MW-04-20131009 and MB-MW-06-20131010 should be considered biased high and have been flagged "K" on the data tables. High recoveries (> laboratory acceptance limits) were observed for the monitoring compounds in the associated LCS/LCSD analyses. The LCS/LCSD samples for PCBs are spiked with Aroclor-1016 and Aroclor-1260 only. The recoveries of Aroclor-1016 and Aroclor-1260 are intended to be representative of all Aroclor compounds.

- The DL for Aroclor compounds in sample MB-MW-06-20131010 may be higher than reported, and the "not-detected" results have been flagged "UL" on the data tables. The reported positive result for Aroclor-1242 in sample MB-MW-06-20131010 should be considered biased low and has been flagged "L" on the data tables. A low recovery (< the lower laboratory acceptance limit) was observed for the surrogate compound decachlorobiphenyl in the sample analyses.

- One field duplicate pair (sample MB-MW-04-20131009 and its field duplicate, sample DUP-20131009) was submitted and analyzed for semivolatile organic compounds and PCBs with this data set. Acceptable precision and sample representativeness (the

relative percent differenced [RPDs] were < 30% when both results were ≥ 5 × the RL or the difference was > the RL when one result was < 5 × the RL) were demonstrated between the results in the field duplicate samples with the following exceptions. The DL for Aroclor-1242 in sample DUP-20131009 may be higher than reported, and the "not-detected" result has been flagged "UJ" on the data tables. In addition, the reported positive result for Aroclor-1242 in sample MB-MW-04-20131009 and for acenaphthene in samples MB-MW-04-20131009 and DUP-20131009 should be considered estimated and has been flagged "J" on the data tables.

- For cases when sample results were qualified both as estimated with a direction of bias (L, UL, or K) and as estimated with unknown bias (J or UJ), only the unknown bias qualifier has been included on the data tables.

- The PCBs (total) results for samples MB-MW-04-20131009 and MB-MW-06-20131010 have been flagged "J" on the data tables. The positive Aroclor results which comprise the PCBs (total) reported concentration were qualified as estimated ("J").

- All results reported at concentrations less than the sample-specific RL (adjusted for dilution factors and sample volume) and above the MDL should be between considered estimated and have been flagged "J" on the data tables.

Complete support documentation of this organic data QA review is presented in Section 3.

B. Conclusions

Based on this quality assurance review, the result for 3,3′-dichlorobenzidine in one sample was qualified as unusable due to very low MS/MSD recoveries. A portion of the data was qualified as estimated due to field duplicate precision, low surrogate recoveries, low matrix spike/matrix spike duplicate recoveries, and reported positive results between the MDL and RL. In order to use any of the data, the data user should understand the qualifications and limitations as specified in this QA review. The Case Narrative and Project Chain-of-Custody Record is presented in Section 4. Project Correspondence is presented in Section 5.

Report Prepared by,

Stephen T. Zeiner, CEAC
Senior Technical Chemist/
Project Manager

Report Reviewed and Approved by,

Steven J. Lennon
Senior Quality Assurance Chemist

Report Reviewed and Approved by,

Rock J. Vitale, CEAC
Technical Director of Chemistry/
Principal

ENVIRONMENTAL STANDARDS, INC.
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(610) 935-5577

Date: 11/19/13

SECTION 2

ANALYTICAL RESULTS

ORGANIC DATA QUALIFIERS

B	This result should be considered "not-detected" because it was detected in a laboratory and/or equipment blank at a similar level.
R	The data are unusable. (Note: The analyte may or may not be present.)
J	The associated value is an estimated quantity.
UJ	This analyte was analyzed for but was not detected. The associated reporting limit is an estimate and may be inaccurate or imprecise.
K	The analyte is present. The reported value may be biased high. The actual value is expected to be lower than reported.
L	The analyte is present. The reported values may be biased low. The actual value is expected to be higher than reported.
UL	The analyte was not detected, and the detection limit is probably higher than reported.

sys_sample_code	Analysis date	chemical_name	result_ value	result_type_ code	detect _flag	lab_ qualifiers	method_detection _limit	reporting_detection _limit	quantitation _limit	result_ unit	validator_ qualifiers
MB-MW-02-20131009	10/19/2013	Aroclor-1268		TRG	N	U	0.0027	0.0094	0.0026	ug/l	U
MB-MW-02-20131009	10/19/2013	PCBs (total)		TRG	N	U	0.0029	0.0094	0.0028	ug/l	U
MB-MW-02-20131009	10/19/2013	Aroclor-1254		TRG	N	U	0.0023	0.0094	0.0022	ug/l	U
MB-MW-02-20131009	10/19/2013	Aroclor-1221		TRG	N	U	0.0025	0.0094	0.0023	ug/l	U
MB-MW-02-20131009	10/19/2013	Aroclor-1232		TRG	N	U	0.0029	0.0094	0.0028	ug/l	U
MB-MW-02-20131009	10/19/2013	Aroclor-1248		TRG	N	U	0.0023	0.0094	0.0021	ug/l	U
MB-MW-02-20131009	10/19/2013	Aroclor-1016		TRG	N	U	0.0025	0.0094	0.0024	ug/l	U
MB-MW-02-20131009	10/19/2013	Aroclor-1262		TRG	N	U	0.0021	0.0094	0.0019	ug/l	U
MB-MW-02-20131009	10/19/2013	Aroclor-1242		TRG	N	U	0.0019	0.0094	0.0018	ug/l	U
MB-MW-02-20131009	10/19/2013	Aroclor-1260		TRG	N	U	0.0014	0.0094	0.0013	ug/l	U
MB-MW-02-20131009	10/17/2013	2,4-Dinitrophenol		TRG	N	U	6.1	49	6	ug/l	U
MB-MW-02-20131009	10/17/2013	4-Chlorophenyl-phenyl ether		TRG	N	U	0.5	9.7	0.49	ug/l	U
MB-MW-02-20131009	10/17/2013	N-Nitrosodiphenylamine		TRG	N	U	0.85	9.7	0.83	ug/l	U
MB-MW-02-20131009	10/17/2013	Butylbenzylphthalate		TRG	N	U	1.4	9.7	1.4	ug/l	U
MB-MW-02-20131009	10/17/2013	Phenanthrene		TRG	N	U	0.43	1.9	0.41	ug/l	U
MB-MW-02-20131009	10/17/2013	Di-n-butylphthalate		TRG	N	U	1.2	9.7	1.2	ug/l	U
MB-MW-02-20131009	10/17/2013	Diethylphthalate	97	TRG	Y		1.5	9.7	1.4	ug/l	L
MB-MW-02-20131009	10/17/2013	Isophorone		TRG	N	U	0.64	9.7	0.63	ug/l	U
MB-MW-02-20131009	10/17/2013	Hexachloroethane		TRG	N	U	0.63	9.7	0.61	ug/l	U
MB-MW-02-20131009	10/17/2013	N-Nitroso-di-n-propylamine		TRG	N	U	0.31	1.9	0.3	ug/l	U
MB-MW-02-20131009	10/17/2013	2,6-Dinitrotoluene		TRG	N	U	0.8	9.7	0.77	ug/l	U
MB-MW-02-20131009	10/17/2013	4-Chloro-3-methylphenol		TRG	N	U	0.75	9.7	0.73	ug/l	U
MB-MW-02-20131009	10/17/2013	Benzo(a)anthracene		TRG	N	U	0.15	1.9	0.14	ug/l	U
MB-MW-02-20131009	10/17/2013	Fluorene		TRG	N	U	0.22	1.9	0.21	ug/l	U
MB-MW-02-20131009	10/17/2013	4,6-Dinitro-2-methylphenol		TRG	N	U	2.2	49	2.1	ug/l	U
MB-MW-02-20131009	10/17/2013	2-Methylnaphthalene		TRG	N	U	0.12	1.9	0.12	ug/l	U
MB-MW-02-20131009	10/17/2013	Dibenz(a,h)anthracene		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-MW-02-20131009	10/17/2013	2-Chloronaphthalene		TRG	N	U	0.15	1.9	0.15	ug/l	U
MB-MW-02-20131009	10/17/2013	3-Nitroaniline		TRG	N	U	3.2	49	3.1	ug/l	U
MB-MW-02-20131009	10/17/2013	Nitrobenzene		TRG	N	U	0.84	19	0.82	ug/l	U
MB-MW-02-20131009	10/17/2013	Acetophenone		TRG	N	U	0.8	9.7	0.78	ug/l	U
MB-MW-02-20131009	10/17/2013	2,4,5-Trichlorophenol		TRG	N	U	1.5	9.7	1.5	ug/l	U
MB-MW-02-20131009	10/17/2013	2-Chlorophenol		TRG	N	U	1.7	9.7	1.6	ug/l	U
MB-MW-02-20131009	10/17/2013	2-Methylphenol		TRG	N	U	0.86	9.7	0.84	ug/l	U
MB-MW-02-20131009	10/17/2013	2-Nitrophenol		TRG	N	U	1.7	9.7	1.7	ug/l	U
MB-MW-02-20131009	10/17/2013	3,3'-Dichlorobenzidine		TRG	N	U	1.1	9.7	1.1	ug/l	R
MB-MW-02-20131009	10/17/2013	Carbazole		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-MW-02-20131009	10/17/2013	Hexachlorocyclopentadiene		TRG	N	U	0.52	9.7	0.5	ug/l	U
MB-MW-02-20131009	10/17/2013	Naphthalene	1.2	TRG	Y	J	0.14	1.9	0.14	ug/l	J
MB-MW-02-20131009	10/17/2013	Benzo(a)pyrene		TRG	N	U	0.13	1.9	0.13	ug/l	U
MB-MW-02-20131009	10/17/2013	2-Nitroaniline		TRG	N	U	3.5	49	3.4	ug/l	U
MB-MW-02-20131009	10/17/2013	2,4,6-Trichlorophenol		TRG	N	U	1.7	9.7	1.7	ug/l	U
MB-MW-02-20131009	10/17/2013	Pentachlorophenol		TRG	N	U	0.66	9.7	0.64	ug/l	U
MB-MW-02-20131009	10/17/2013	Hexachlorobutadiene		TRG	N	U	0.17	1.9	0.16	ug/l	U
MB-MW-02-20131009	10/17/2013	Biphenyl		TRG	N	U	0.42	9.7	0.4	ug/l	U
MB-MW-02-20131009	10/17/2013	4-Chloroaniline		TRG	N	U	0.89	9.7	0.86	ug/l	U
MB-MW-02-20131009	10/17/2013	Anthracene		TRG	N	U	0.15	1.9	0.15	ug/l	U
MB-MW-02-20131009	10/17/2013	Hexachlorobenzene		TRG	N	U	0.18	1.9	0.18	ug/l	U

sys_sample_code	Analysis date	chemical_name	result_ value	result_type_ code	detect _flag	lab_ qualifiers	method_detection _limit	reporting_detection _limit	quantitation _limit	result_ unit	validator_ qualifiers
MB-MW-02-20131009	10/17/2013	Di-n-octylphthalate		TRG	N	U	2.1	9.7	2	ug/l	U
MB-MW-02-20131009	10/17/2013	bis(2-Ethylhexyl)phthalate		TRG	N	U	13	19	12	ug/l	U
MB-MW-02-20131009	10/17/2013	bis(2-Chloroethoxy)methane		TRG	N	U	0.58	9.7	0.56	ug/l	U
MB-MW-02-20131009	10/17/2013	bis(2-Chloroethyl) ether		TRG	N	U	0.25	1.9	0.24	ug/l	U
MB-MW-02-20131009	10/17/2013	2,4-Dichlorophenol		TRG	N	U	0.33	1.9	0.32	ug/l	U
MB-MW-02-20131009	10/17/2013	2,2'-oxybis(1-Chloropropane)		TRG	N	U	0.2	1.9	0.19	ug/l	U
MB-MW-02-20131009	10/17/2013	Benzaldehyde		TRG	N	U	1.5	9.7	1.5	ug/l	U
MB-MW-02-20131009	10/17/2013	2,4-Dimethylphenol	150	TRG	Y		0.85	9.7	0.83	ug/l	
MB-MW-02-20131009	10/17/2013	Caprolactam	42	TRG	Y	J	12	49	12	ug/l	J
MB-MW-02-20131009	10/17/2013	4-Bromophenyl-phenyl ether		TRG	N	U	0.64	9.7	0.62	ug/l	U
MB-MW-02-20131009	10/17/2013	4-Nitrophenol		TRG	N	U	6.5	49	6.3	ug/l	U
MB-MW-02-20131009	10/17/2013	Acenaphthene		TRG	N	U	0.14	1.9	0.14	ug/l	U
MB-MW-02-20131009	10/17/2013	4-Nitroaniline		TRG	N	U	1.7	49	1.7	ug/l	U
MB-MW-02-20131009	10/17/2013	Phenol		TRG	N	U	0.58	1.9	0.56	ug/l	U
MB-MW-02-20131009	10/17/2013	Benzo(b)fluoranthene		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-MW-02-20131009	10/17/2013	2,4-Dinitrotoluene		TRG	N	U	0.54	9.7	0.52	ug/l	U
MB-MW-02-20131009	10/17/2013	3&4-Methylphenol		TRG	N	U	0.9	9.7	0.88	ug/l	U
MB-MW-02-20131009	10/17/2013	Chrysene		TRG	N	U	0.14	1.9	0.14	ug/l	U
MB-MW-02-20131009	10/17/2013	Acenaphthylene		TRG	N	U	0.15	1.9	0.15	ug/l	U
MB-MW-02-20131009	10/17/2013	Benzo(k)fluoranthene		TRG	N	U	0.55	1.9	0.53	ug/l	U
MB-MW-02-20131009	10/17/2013	Fluoranthene		TRG	N	U	0.16	1.9	0.16	ug/l	U
MB-MW-02-20131009	10/17/2013	Indeno(1,2,3-cd)pyrene		TRG	N	U	0.2	1.9	0.19	ug/l	U
MB-MW-02-20131009	10/17/2013	Benzo(g,h,i)perylene		TRG	N	U	0.15	1.9	0.15	ug/l	U
MB-MW-02-20131009	10/17/2013	Atrazine		TRG	N	U	0.89	9.7	0.87	ug/l	U
MB-MW-02-20131009	10/17/2013	Dibenzofuran		TRG	N	U	0.62	9.7	0.6	ug/l	U
MB-MW-02-20131009	10/17/2013	Dimethylphthalate		TRG	N	U	0.77	9.7	0.74	ug/l	U
MB-MW-02-20131009	10/17/2013	Pyrene		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-MW-01-20131009	10/21/2013	Aroclor-1262		TRG	N	U	0.0021	0.0095	0.002	ug/l	U
MB-MW-01-20131009	10/21/2013	PCBs (total)		TRG	N	U	0.0029	0.0095	0.0028	ug/l	U
MB-MW-01-20131009	10/21/2013	Aroclor-1260		TRG	N	U	0.0014	0.0095	0.0013	ug/l	U
MB-MW-01-20131009	10/21/2013	Aroclor-1254		TRG	N	U	0.0023	0.0095	0.0022	ug/l	U
MB-MW-01-20131009	10/21/2013	Aroclor-1268		TRG	N	U	0.0027	0.0095	0.0026	ug/l	U
MB-MW-01-20131009	10/21/2013	Aroclor-1221		TRG	N	U	0.0025	0.0095	0.0024	ug/l	U
MB-MW-01-20131009	10/21/2013	Aroclor-1232		TRG	N	U	0.0029	0.0095	0.0028	ug/l	U
MB-MW-01-20131009	10/21/2013	Aroclor-1248		TRG	N	U	0.0023	0.0095	0.0022	ug/l	U
MB-MW-01-20131009	10/21/2013	Aroclor-1242		TRG	N	U	0.0019	0.0095	0.0018	ug/l	U
MB-MW-01-20131009	10/21/2013	Aroclor-1016		TRG	N	U	0.0025	0.0095	0.0024	ug/l	U
MB-MW-01-20131009	10/17/2013	Benzo(k)fluoranthene		TRG	N	U	0.55	1.9	0.53	ug/l	U
MB-MW-01-20131009	10/17/2013	Dimethylphthalate		TRG	N	U	0.77	9.6	0.74	ug/l	U
MB-MW-01-20131009	10/17/2013	Dibenzofuran		TRG	N	U	0.62	9.6	0.59	ug/l	U
MB-MW-01-20131009	10/17/2013	Atrazine		TRG	N	U	0.89	9.6	0.86	ug/l	U
MB-MW-01-20131009	10/17/2013	Benzo(g,h,i)perylene		TRG	N	U	0.15	1.9	0.15	ug/l	U
MB-MW-01-20131009	10/17/2013	Indeno(1,2,3-cd)pyrene		TRG	N	U	0.2	1.9	0.19	ug/l	U
MB-MW-01-20131009	10/17/2013	Fluoranthene		TRG	N	U	0.16	1.9	0.16	ug/l	U
MB-MW-01-20131009	10/17/2013	2,4-Dichlorophenol		TRG	N	U	0.33	1.9	0.32	ug/l	U
MB-MW-01-20131009	10/17/2013	4-Nitrophenol		TRG	N	U	6.5	48	6.2	ug/l	U
MB-MW-01-20131009	10/17/2013	Chrysene		TRG	N	U	0.14	1.9	0.13	ug/l	U
MB-MW-01-20131009	10/17/2013	3-Nitroaniline		TRG	N	U	3.2	48	3.1	ug/l	U

sys_sample_code	Analysis date	chemical_name	result_ value	result_type_ code	detect _flag	lab_ qualifiers	method_detection _limit	reporting_detection _limit	quantitation _limit	result_ unit	validator_ qualifiers
MB-MW-01-20131009	10/17/2013	3&4-Methylphenol		TRG	N	U	0.9	9.6	0.87	ug/l	U
MB-MW-01-20131009	10/17/2013	Benzo(b)fluoranthene		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-MW-01-20131009	10/17/2013	bis(2-Chloroethyl) ether		TRG	N	U	0.25	1.9	0.24	ug/l	U
MB-MW-01-20131009	10/17/2013	4-Nitroaniline		TRG	N	U	1.7	48	1.7	ug/l	U
MB-MW-01-20131009	10/17/2013	Benzaldehyde		TRG	N	U	1.5	9.6	1.4	ug/l	U
MB-MW-01-20131009	10/17/2013	4-Bromophenyl-phenyl ether		TRG	N	U	0.64	9.6	0.61	ug/l	U
MB-MW-01-20131009	10/17/2013	Caprolactam		TRG	N	U	12	48	11	ug/l	U
MB-MW-01-20131009	10/17/2013	2,4-Dimethylphenol		TRG	N	U	0.85	9.6	0.82	ug/l	U
MB-MW-01-20131009	10/17/2013	4-Chloroaniline		TRG	N	U	0.89	9.6	0.85	ug/l	U
MB-MW-01-20131009	10/17/2013	Pyrene		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-MW-01-20131009	10/17/2013	Phenol		TRG	N	U	0.58	1.9	0.56	ug/l	U
MB-MW-01-20131009	10/17/2013	2,4-Dinitrotoluene		TRG	N	U	0.54	9.6	0.52	ug/l	U
MB-MW-01-20131009	10/17/2013	bis(2-Chloroethoxy)methane		TRG	N	U	0.58	9.6	0.56	ug/l	U
MB-MW-01-20131009	10/17/2013	bis(2-Ethylhexyl)phthalate		TRG	N	U	13	19	12	ug/l	U
MB-MW-01-20131009	10/17/2013	Hexachlorobenzene		TRG	N	U	0.18	1.9	0.18	ug/l	U
MB-MW-01-20131009	10/17/2013	Anthracene	0.35	TRG	Y	J	0.15	1.9	0.15	ug/l	J
MB-MW-01-20131009	10/17/2013	2,2'-oxybis(1-Chloropropane)		TRG	N	U	0.2	1.9	0.19	ug/l	U
MB-MW-01-20131009	10/17/2013	2-Chloronaphthalene		TRG	N	U	0.15	1.9	0.15	ug/l	U
MB-MW-01-20131009	10/17/2013	Carbazole	0.85	TRG	Y	J	0.16	1.9	0.15	ug/l	J
MB-MW-01-20131009	10/17/2013	Hexachlorobutadiene		TRG	N	U	0.17	1.9	0.16	ug/l	U
MB-MW-01-20131009	10/17/2013	Pentachlorophenol		TRG	N	U	0.66	9.6	0.64	ug/l	U
MB-MW-01-20131009	10/17/2013	Benzo(a)pyrene		TRG	N	U	0.13	1.9	0.13	ug/l	U
MB-MW-01-20131009	10/17/2013	2-Nitroaniline		TRG	N	U	3.5	48	3.4	ug/l	U
MB-MW-01-20131009	10/17/2013	Acenaphthylene		TRG	N	U	0.15	1.9	0.15	ug/l	U
MB-MW-01-20131009	10/17/2013	Fluorene	0.51	TRG	Y	J	0.22	1.9	0.21	ug/l	J
MB-MW-01-20131009	10/17/2013	2-Methylnaphthalene	0.28	TRG	Y	J	0.12	1.9	0.12	ug/l	J
MB-MW-01-20131009	10/17/2013	2,4,6-Trichlorophenol		TRG	N	U	1.7	9.6	1.7	ug/l	U
MB-MW-01-20131009	10/17/2013	3,3'-Dichlorobenzidine		TRG	N	U	1.1	9.6	1.1	ug/l	U
MB-MW-01-20131009	10/17/2013	Biphenyl		TRG	N	U	0.42	9.6	0.4	ug/l	U
MB-MW-01-20131009	10/17/2013	2-Methylphenol		TRG	N	U	0.86	9.6	0.83	ug/l	U
MB-MW-01-20131009	10/17/2013	2-Chlorophenol		TRG	N	U	1.7	9.6	1.6	ug/l	U
MB-MW-01-20131009	10/17/2013	2,4,5-Trichlorophenol		TRG	N	U	1.5	9.6	1.5	ug/l	U
MB-MW-01-20131009	10/17/2013	Acetophenone		TRG	N	U	0.8	9.6	0.77	ug/l	U
MB-MW-01-20131009	10/17/2013	Nitrobenzene		TRG	N	U	0.84	19	0.81	ug/l	U
MB-MW-01-20131009	10/17/2013	Naphthalene	23	TRG	Y		0.14	1.9	0.13	ug/l	
MB-MW-01-20131009	10/17/2013	Benzo(a)anthracene		TRG	N	U	0.15	1.9	0.14	ug/l	U
MB-MW-01-20131009	10/17/2013	2,4-Dinitrophenol		TRG	N	U	6.1	48	5.9	ug/l	U
MB-MW-01-20131009	10/17/2013	2-Nitrophenol		TRG	N	U	1.7	9.6	1.6	ug/l	U
MB-MW-01-20131009	10/17/2013	Dibenz(a,h)anthracene		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-MW-01-20131009	10/17/2013	N-Nitrosodiphenylamine		TRG	N	U	0.85	9.6	0.82	ug/l	U
MB-MW-01-20131009	10/17/2013	4-Chloro-3-methylphenol		TRG	N	U	0.75	9.6	0.73	ug/l	U
MB-MW-01-20131009	10/17/2013	2,6-Dinitrotoluene		TRG	N	U	0.8	9.6	0.77	ug/l	U
MB-MW-01-20131009	10/17/2013	N-Nitroso-di-n-propylamine		TRG	N	U	0.31	1.9	0.3	ug/l	U
MB-MW-01-20131009	10/17/2013	Hexachloroethane		TRG	N	U	0.63	9.6	0.6	ug/l	U
MB-MW-01-20131009	10/17/2013	Hexachlorocyclopentadiene		TRG	N	U	0.52	9.6	0.5	ug/l	U
MB-MW-01-20131009	10/17/2013	Isophorone		TRG	N	U	0.64	9.6	0.62	ug/l	U
MB-MW-01-20131009	10/17/2013	Acenaphthene	1.4	TRG	Y	J	0.14	1.9	0.14	ug/l	J
MB-MW-01-20131009	10/17/2013	Diethylphthalate		TRG	N	U	1.5	9.6	1.4	ug/l	U

sys_sample_code	Analysis date	chemical_name	result_ value	result_type_ code	detect _flag	lab_ qualifiers	method_detection _limit	reporting_detection _limit	quantitation _limit	result_ unit	validator_ qualifiers
MB-MW-01-20131009	10/17/2013	Di-n-butylphthalate		TRG	N	U	1.2	9.6	1.2	ug/l	U
MB-MW-01-20131009	10/17/2013	Phenanthrene	0.42	TRG	Y	J	0.43	1.9	0.41	ug/l	J
MB-MW-01-20131009	10/17/2013	Butylbenzylphthalate		TRG	N	U	1.4	9.6	1.4	ug/l	U
MB-MW-01-20131009	10/17/2013	4-Chlorophenyl-phenyl ether		TRG	N	U	0.5	9.6	0.48	ug/l	U
MB-MW-01-20131009	10/17/2013	4,6-Dinitro-2-methylphenol		TRG	N	U	2.2	48	2.1	ug/l	U
MB-MW-03-20131009	10/20/2013	Aroclor-1260		TRG	N	U	0.0014	0.0095	0.0013	ug/l	U
MB-MW-03-20131009	10/20/2013	Aroclor-1242		TRG	N	U	0.0019	0.0095	0.0018	ug/l	U
MB-MW-03-20131009	10/20/2013	Aroclor-1262		TRG	N	U	0.0021	0.0095	0.002	ug/l	U
MB-MW-03-20131009	10/20/2013	Aroclor-1016		TRG	N	U	0.0025	0.0095	0.0024	ug/l	U
MB-MW-03-20131009	10/20/2013	Aroclor-1248		TRG	N	U	0.0023	0.0095	0.0022	ug/l	U
MB-MW-03-20131009	10/20/2013	Aroclor-1232		TRG	N	U	0.0029	0.0095	0.0028	ug/l	U
MB-MW-03-20131009	10/20/2013	Aroclor-1268		TRG	N	U	0.0027	0.0095	0.0026	ug/l	U
MB-MW-03-20131009	10/20/2013	PCBs (total)		TRG	N	U	0.0029	0.0095	0.0028	ug/l	U
MB-MW-03-20131009	10/20/2013	Aroclor-1221		TRG	N	U	0.0025	0.0095	0.0024	ug/l	U
MB-MW-03-20131009	10/20/2013	Aroclor-1254		TRG	N	U	0.0023	0.0095	0.0022	ug/l	U
MB-MW-03-20131009	10/17/2013	N-Nitroso-di-n-propylamine		TRG	N	U	0.31	1.9	0.3	ug/l	U
MB-MW-03-20131009	10/17/2013	Phenanthrene		TRG	N	U	0.43	1.9	0.41	ug/l	U
MB-MW-03-20131009	10/17/2013	Di-n-butylphthalate		TRG	N	U	1.2	9.6	1.2	ug/l	U
MB-MW-03-20131009	10/17/2013	Diethylphthalate		TRG	N	U	1.5	9.6	1.4	ug/l	U
MB-MW-03-20131009	10/17/2013	Acenaphthene	0.24	TRG	Y	J	0.14	1.9	0.14	ug/l	J
MB-MW-03-20131009	10/17/2013	Isophorone		TRG	N	U	0.64	9.6	0.62	ug/l	U
MB-MW-03-20131009	10/17/2013	Hexachlorocyclopentadiene		TRG	N	U	0.52	9.6	0.5	ug/l	U
MB-MW-03-20131009	10/17/2013	Benzo(a)pyrene		TRG	N	U	0.13	1.9	0.13	ug/l	U
MB-MW-03-20131009	10/17/2013	Hexachloroethane		TRG	N	U	0.63	9.6	0.6	ug/l	U
MB-MW-03-20131009	10/17/2013	Fluorene		TRG	N	U	0.22	1.9	0.21	ug/l	U
MB-MW-03-20131009	10/17/2013	2,6-Dinitrotoluene		TRG	N	U	0.8	9.6	0.77	ug/l	U
MB-MW-03-20131009	10/17/2013	4-Chloro-3-methylphenol		TRG	N	U	0.75	9.6	0.73	ug/l	U
MB-MW-03-20131009	10/17/2013	Benzo(a)anthracene		TRG	N	U	0.15	1.9	0.14	ug/l	U
MB-MW-03-20131009	10/17/2013	Dibenz(a,h)anthracene		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-MW-03-20131009	10/17/2013	4,6-Dinitro-2-methylphenol		TRG	N	U	2.2	48	2.1	ug/l	U
MB-MW-03-20131009	10/17/2013	2,4-Dinitrophenol		TRG	N	U	6.1	48	5.9	ug/l	U
MB-MW-03-20131009	10/17/2013	4-Chlorophenyl-phenyl ether		TRG	N	U	0.5	9.6	0.48	ug/l	U
MB-MW-03-20131009	10/17/2013	2-Chlorophenol		TRG	N	U	1.7	9.6	1.6	ug/l	U
MB-MW-03-20131009	10/17/2013	2-Nitroaniline		TRG	N	U	3.5	48	3.4	ug/l	U
MB-MW-03-20131009	10/17/2013	2-Nitrophenol		TRG	N	U	1.7	9.6	1.6	ug/l	U
MB-MW-03-20131009	10/17/2013	Naphthalene		TRG	N	U	0.14	1.9	0.13	ug/l	U
MB-MW-03-20131009	10/17/2013	2-Methylnaphthalene		TRG	N	U	0.12	1.9	0.12	ug/l	U
MB-MW-03-20131009	10/17/2013	2-Chloronaphthalene		TRG	N	U	0.15	1.9	0.15	ug/l	U
MB-MW-03-20131009	10/17/2013	3,3'-Dichlorobenzidine		TRG	N	U	1.1	9.6	1.1	ug/l	U
MB-MW-03-20131009	10/17/2013	Butylbenzylphthalate		TRG	N	U	1.4	9.6	1.4	ug/l	U
MB-MW-03-20131009	10/17/2013	2-Methylphenol		TRG	N	U	0.86	9.6	0.83	ug/l	U
MB-MW-03-20131009	10/17/2013	N-Nitrosodiphenylamine		TRG	N	U	0.85	9.6	0.82	ug/l	U
MB-MW-03-20131009	10/17/2013	2,4,5-Trichlorophenol		TRG	N	U	1.5	9.6	1.5	ug/l	U
MB-MW-03-20131009	10/17/2013	Acetophenone		TRG	N	U	0.8	9.6	0.77	ug/l	U
MB-MW-03-20131009	10/17/2013	Nitrobenzene		TRG	N	U	0.84	19	0.81	ug/l	U
MB-MW-03-20131009	10/17/2013	3-Nitroaniline		TRG	N	U	3.2	48	3.1	ug/l	U
MB-MW-03-20131009	10/17/2013	2,4,6-Trichlorophenol		TRG	N	U	1.7	9.6	1.7	ug/l	U
MB-MW-03-20131009	10/17/2013	Hexachlorobutadiene		TRG	N	U	0.17	1.9	0.16	ug/l	U

sys_sample_code	Analysis date	chemical_name	result_ value	result_type_ code	detect _flag	lab_ qualifiers	method_detection _limit	reporting_detection _limit	quantitation _limit	result_ unit	validator_ qualifiers
MB-MW-03-20131009	10/17/2013	Carbazole		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-MW-03-20131009	10/17/2013	Biphenyl		TRG	N	U	0.42	9.6	0.4	ug/l	U
MB-MW-03-20131009	10/17/2013	2,2'-oxybis(1-Chloropropane)		TRG	N	U	0.2	1.9	0.19	ug/l	U
MB-MW-03-20131009	10/17/2013	Anthracene		TRG	N	U	0.15	1.9	0.15	ug/l	U
MB-MW-03-20131009	10/17/2013	Hexachlorobenzene		TRG	N	U	0.18	1.9	0.18	ug/l	U
MB-MW-03-20131009	10/17/2013	Di-n-octylphthalate		TRG	N	U	2.1	9.6	2	ug/l	U
MB-MW-03-20131009	10/17/2013	bis(2-Ethylhexyl)phthalate		TRG	N	U	13	19	12	ug/l	U
MB-MW-03-20131009	10/17/2013	2,4-Dichlorophenol		TRG	N	U	0.33	1.9	0.32	ug/l	U
MB-MW-03-20131009	10/17/2013	Pentachlorophenol		TRG	N	U	0.66	9.6	0.64	ug/l	U
MB-MW-03-20131009	10/17/2013	bis(2-Chloroethoxy)methane		TRG	N	U	0.58	9.6	0.56	ug/l	U
MB-MW-03-20131009	10/17/2013	4-Chloroaniline		TRG	N	U	0.89	9.6	0.85	ug/l	U
MB-MW-03-20131009	10/17/2013	2,4-Dimethylphenol		TRG	N	U	0.85	9.6	0.82	ug/l	U
MB-MW-03-20131009	10/17/2013	Caprolactam	15	TRG	Y	J	12	48	11	ug/l	J
MB-MW-03-20131009	10/17/2013	4-Bromophenyl-phenyl ether		TRG	N	U	0.64	9.6	0.61	ug/l	U
MB-MW-03-20131009	10/17/2013	Benzaldehyde		TRG	N	U	1.5	9.6	1.4	ug/l	U
MB-MW-03-20131009	10/17/2013	4-Nitrophenol		TRG	N	U	6.5	48	6.2	ug/l	U
MB-MW-03-20131009	10/17/2013	4-Nitroaniline		TRG	N	U	1.7	48	1.7	ug/l	U
MB-MW-03-20131009	10/17/2013	bis(2-Chloroethyl) ether		TRG	N	U	0.25	1.9	0.24	ug/l	U
MB-MW-03-20131009	10/17/2013	Phenol		TRG	N	U	0.58	1.9	0.56	ug/l	U
MB-MW-03-20131009	10/17/2013	2,4-Dinitrotoluene		TRG	N	U	0.54	9.6	0.52	ug/l	U
MB-MW-03-20131009	10/17/2013	3&4-Methylphenol		TRG	N	U	0.9	9.6	0.87	ug/l	U
MB-MW-03-20131009	10/17/2013	Chrysene		TRG	N	U	0.14	1.9	0.13	ug/l	U
MB-MW-03-20131009	10/17/2013	Acenaphthylene		TRG	N	U	0.15	1.9	0.15	ug/l	U
MB-MW-03-20131009	10/17/2013	Benzo(k)fluoranthene		TRG	N	U	0.55	1.9	0.53	ug/l	U
MB-MW-03-20131009	10/17/2013	Fluoranthene	0.37	TRG	Y	J	0.16	1.9	0.16	ug/l	J
MB-MW-03-20131009	10/17/2013	Benzo(b)fluoranthene		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-MW-03-20131009	10/17/2013	Indeno(1,2,3-cd)pyrene		TRG	N	U	0.2	1.9	0.19	ug/l	U
MB-MW-03-20131009	10/17/2013	Benzo(g,h,i)perylene		TRG	N	U	0.15	1.9	0.15	ug/l	U
MB-MW-03-20131009	10/17/2013	Atrazine		TRG	N	U	0.89	9.6	0.86	ug/l	U
MB-MW-03-20131009	10/17/2013	Dimethylphthalate		TRG	N	U	0.77	9.6	0.74	ug/l	U
MB-MW-03-20131009	10/17/2013	Pyrene		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-MW-03-20131009	10/17/2013	Dibenzofuran		TRG	N	U	0.62	9.6	0.59	ug/l	U
MB-EB-20131009	10/20/2013	Aroclor-1260		TRG	N	U	0.0014	0.0095	0.0013	ug/l	U
MB-EB-20131009	10/20/2013	Aroclor-1262		TRG	N	U	0.0021	0.0095	0.002	ug/l	U
MB-EB-20131009	10/20/2013	Aroclor-1242		TRG	N	U	0.0019	0.0095	0.0018	ug/l	U
MB-EB-20131009	10/20/2013	PCBs (total)		TRG	N	U	0.0029	0.0095	0.0028	ug/l	U
MB-EB-20131009	10/20/2013	Aroclor-1254		TRG	N	U	0.0023	0.0095	0.0022	ug/l	U
MB-EB-20131009	10/20/2013	Aroclor-1268		TRG	N	U	0.0027	0.0095	0.0026	ug/l	U
MB-EB-20131009	10/20/2013	Aroclor-1221		TRG	N	U	0.0025	0.0095	0.0024	ug/l	U
MB-EB-20131009	10/20/2013	Aroclor-1232		TRG	N	U	0.0029	0.0095	0.0028	ug/l	U
MB-EB-20131009	10/20/2013	Aroclor-1248		TRG	N	U	0.0023	0.0095	0.0022	ug/l	U
MB-EB-20131009	10/20/2013	Aroclor-1016		TRG	N	U	0.0025	0.0095	0.0024	ug/l	U
MB-EB-20131009	10/17/2013	Fluorene		TRG	N	U	0.22	1.9	0.21	ug/l	U
MB-EB-20131009	10/17/2013	N-Nitrosodiphenylamine		TRG	N	U	0.85	9.5	0.81	ug/l	U
MB-EB-20131009	10/17/2013	Butylbenzylphthalate		TRG	N	U	1.4	9.5	1.4	ug/l	U
MB-EB-20131009	10/17/2013	Phenanthrene		TRG	N	U	0.43	1.9	0.41	ug/l	U
MB-EB-20131009	10/17/2013	Di-n-butylphthalate		TRG	N	U	1.2	9.5	1.2	ug/l	U
MB-EB-20131009	10/17/2013	Diethylphthalate		TRG	N	U	1.5	9.5	1.4	ug/l	U

sys_sample_code	Analysis date	chemical_name	result_ value	result_type_ code	detect _flag	lab_ qualifiers	method_detection _limit	reporting_detection _limit	quantitation _limit	result_ unit	validator_ qualifiers
MB-EB-20131009	10/17/2013	Carbazole		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-EB-20131009	10/17/2013	Acenaphthene		TRG	N	U	0.14	1.9	0.14	ug/l	U
MB-EB-20131009	10/17/2013	Isophorone		TRG	N	U	0.64	9.5	0.61	ug/l	U
MB-EB-20131009	10/17/2013	Hexachlorocyclopentadiene		TRG	N	U	0.52	9.5	0.49	ug/l	U
MB-EB-20131009	10/17/2013	Hexachloroethane		TRG	N	U	0.63	9.5	0.6	ug/l	U
MB-EB-20131009	10/17/2013	Hexachlorobutadiene		TRG	N	U	0.17	1.9	0.16	ug/l	U
MB-EB-20131009	10/17/2013	Biphenyl		TRG	N	U	0.42	9.5	0.4	ug/l	U
MB-EB-20131009	10/17/2013	N-Nitroso-di-n-propylamine		TRG	N	U	0.31	1.9	0.29	ug/l	U
MB-EB-20131009	10/17/2013	4-Chlorophenyl-phenyl ether		TRG	N	U	0.5	9.5	0.48	ug/l	U
MB-EB-20131009	10/17/2013	Pentachlorophenol		TRG	N	U	0.66	9.5	0.63	ug/l	U
MB-EB-20131009	10/17/2013	2,4,6-Trichlorophenol		TRG	N	U	1.7	9.5	1.7	ug/l	U
MB-EB-20131009	10/17/2013	2-Nitroaniline		TRG	N	U	3.5	48	3.3	ug/l	U
MB-EB-20131009	10/17/2013	2-Nitrophenol		TRG	N	U	1.7	9.5	1.6	ug/l	U
MB-EB-20131009	10/17/2013	Naphthalene		TRG	N	U	0.14	1.9	0.13	ug/l	U
MB-EB-20131009	10/17/2013	2-Methylnaphthalene		TRG	N	U	0.12	1.9	0.12	ug/l	U
MB-EB-20131009	10/17/2013	Nitrobenzene		TRG	N	U	0.84	19	0.8	ug/l	U
MB-EB-20131009	10/17/2013	3,3'-Dichlorobenzidine		TRG	N	U	1.1	9.5	1.1	ug/l	U
MB-EB-20131009	10/17/2013	2-Methylphenol		TRG	N	U	0.86	9.5	0.82	ug/l	U
MB-EB-20131009	10/17/2013	2-Chlorophenol		TRG	N	U	1.7	9.5	1.6	ug/l	U
MB-EB-20131009	10/17/2013	2,4,5-Trichlorophenol		TRG	N	U	1.5	9.5	1.5	ug/l	U
MB-EB-20131009	10/17/2013	Acetophenone		TRG	N	U	0.8	9.5	0.76	ug/l	U
MB-EB-20131009	10/17/2013	2,6-Dinitrotoluene		TRG	N	U	0.8	9.5	0.76	ug/l	U
MB-EB-20131009	10/17/2013	2-Chloronaphthalene		TRG	N	U	0.15	1.9	0.14	ug/l	U
MB-EB-20131009	10/17/2013	2,2'-oxybis(1-Chloropropane)		TRG	N	U	0.2	1.9	0.19	ug/l	U
MB-EB-20131009	10/17/2013	2,4-Dinitrotoluene		TRG	N	U	0.54	9.5	0.51	ug/l	U
MB-EB-20131009	10/17/2013	2,4-Dichlorophenol		TRG	N	U	0.33	1.9	0.32	ug/l	U
MB-EB-20131009	10/17/2013	Anthracene		TRG	N	U	0.15	1.9	0.15	ug/l	U
MB-EB-20131009	10/17/2013	Hexachlorobenzene		TRG	N	U	0.18	1.9	0.17	ug/l	U
MB-EB-20131009	10/17/2013	Di-n-octylphthalate		TRG	N	U	2.1	9.5	2	ug/l	U
MB-EB-20131009	10/17/2013	bis(2-Ethylhexyl)phthalate		TRG	N	U	13	19	12	ug/l	U
MB-EB-20131009	10/17/2013	bis(2-Chloroethoxy)methane		TRG	N	U	0.58	9.5	0.55	ug/l	U
MB-EB-20131009	10/17/2013	Pyrene		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-EB-20131009	10/17/2013	Phenol		TRG	N	U	0.58	1.9	0.55	ug/l	U
MB-EB-20131009	10/17/2013	4-Bromophenyl-phenyl ether		TRG	N	U	0.64	9.5	0.6	ug/l	U
MB-EB-20131009	10/17/2013	4-Chloroaniline		TRG	N	U	0.89	9.5	0.84	ug/l	U
MB-EB-20131009	10/17/2013	2,4-Dimethylphenol		TRG	N	U	0.85	9.5	0.81	ug/l	U
MB-EB-20131009	10/17/2013	Caprolactam		TRG	N	U	12	48	11	ug/l	U
MB-EB-20131009	10/17/2013	4-Chloro-3-methylphenol		TRG	N	U	0.75	9.5	0.72	ug/l	U
MB-EB-20131009	10/17/2013	Benzaldehyde		TRG	N	U	1.5	9.5	1.4	ug/l	U
MB-EB-20131009	10/17/2013	Benzo(g,h,i)perylene		TRG	N	U	0.15	1.9	0.14	ug/l	U
MB-EB-20131009	10/17/2013	4-Nitroaniline		TRG	N	U	1.7	48	1.6	ug/l	U
MB-EB-20131009	10/17/2013	3-Nitroaniline		TRG	N	U	3.2	48	3.1	ug/l	U
MB-EB-20131009	10/17/2013	bis(2-Chloroethyl) ether		TRG	N	U	0.25	1.9	0.24	ug/l	U
MB-EB-20131009	10/17/2013	3&4-Methylphenol		TRG	N	U	0.9	9.5	0.86	ug/l	U
MB-EB-20131009	10/17/2013	Dimethylphthalate		TRG	N	U	0.77	9.5	0.73	ug/l	U
MB-EB-20131009	10/17/2013	4-Nitrophenol		TRG	N	U	6.5	48	6.2	ug/l	U
MB-EB-20131009	10/17/2013	Benzo(a)anthracene		TRG	N	U	0.15	1.9	0.14	ug/l	U
MB-EB-20131009	10/17/2013	Dibenz(a,h)anthracene		TRG	N	U	0.16	1.9	0.15	ug/l	U

sys_sample_code	Analysis date	chemical_name	result_ value	result_type_ code	detect _flag	lab_ qualifiers	method_detection _limit	reporting_detection _limit	quantitation _limit	result_ unit	validator_ qualifiers
MB-EB-20131009	10/17/2013	4,6-Dinitro-2-methylphenol		TRG	N	U	2.2	48	2.1	ug/l	U
MB-EB-20131009	10/17/2013	2,4-Dinitrophenol		TRG	N	U	6.1	48	5.8	ug/l	U
MB-EB-20131009	10/17/2013	Benzo(a)pyrene		TRG	N	U	0.13	1.9	0.13	ug/l	U
MB-EB-20131009	10/17/2013	Chrysene		TRG	N	U	0.14	1.9	0.13	ug/l	U
MB-EB-20131009	10/17/2013	Acenaphthylene		TRG	N	U	0.15	1.9	0.14	ug/l	U
MB-EB-20131009	10/17/2013	Benzo(k)fluoranthene		TRG	N	U	0.55	1.9	0.52	ug/l	U
MB-EB-20131009	10/17/2013	Fluoranthene		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-EB-20131009	10/17/2013	Benzo(b)fluoranthene		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-EB-20131009	10/17/2013	Indeno(1,2,3-cd)pyrene		TRG	N	U	0.2	1.9	0.19	ug/l	U
MB-EB-20131009	10/17/2013	Atrazine		TRG	N	U	0.89	9.5	0.85	ug/l	U
MB-EB-20131009	10/17/2013	Dibenzofuran		TRG	N	U	0.62	9.5	0.59	ug/l	U
MB-MW-04-20131009	10/21/2013	Aroclor-1016		TRG	N	U	0.0025	0.0094	0.0024	ug/l	U
MB-MW-04-20131009	10/21/2013	Aroclor-1248		TRG	N	U	0.0023	0.0094	0.0021	ug/l	U
MB-MW-04-20131009	10/21/2013	Aroclor-1242	0.095	TRG	Y		0.0019	0.0094	0.0018	ug/l	J
MB-MW-04-20131009	10/21/2013	PCBs (total)	0.095	TRG	Y		0.0029	0.0094	0.0028	ug/l	J
MB-MW-04-20131009	10/21/2013	Aroclor-1221		TRG	N	U	0.0025	0.0094	0.0023	ug/l	U
MB-MW-04-20131009	10/21/2013	Aroclor-1268		TRG	N	U	0.0027	0.0094	0.0026	ug/l	U
MB-MW-04-20131009	10/21/2013	Aroclor-1254		TRG	N	U	0.0023	0.0094	0.0022	ug/l	U
MB-MW-04-20131009	10/21/2013	Aroclor-1260		TRG	N	U	0.0014	0.0094	0.0013	ug/l	U
MB-MW-04-20131009	10/21/2013	Aroclor-1262		TRG	N	U	0.0021	0.0094	0.0019	ug/l	U
MB-MW-04-20131009	10/21/2013	Aroclor-1232		TRG	N	U	0.0029	0.0094	0.0028	ug/l	U
MB-MW-04-20131009	10/17/2013	Pyrene		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-MW-04-20131009	10/17/2013	Di-n-octylphthalate		TRG	N	U	2.1	9.6	2	ug/l	U
MB-MW-04-20131009	10/17/2013	Hexachlorobenzene		TRG	N	U	0.18	1.9	0.18	ug/l	U
MB-MW-04-20131009	10/17/2013	Anthracene	0.35	TRG	Y	J	0.15	1.9	0.15	ug/l	J
MB-MW-04-20131009	10/17/2013	bis(2-Ethylhexyl)phthalate		TRG	N	U	13	19	12	ug/l	U
MB-MW-04-20131009	10/17/2013	2,4-Dinitrotoluene		TRG	N	U	0.54	9.6	0.52	ug/l	U
MB-MW-04-20131009	10/17/2013	2,2'-oxybis(1-Chloropropane)		TRG	N	U	0.2	1.9	0.19	ug/l	U
MB-MW-04-20131009	10/17/2013	Dimethylphthalate		TRG	N	U	0.77	9.6	0.74	ug/l	U
MB-MW-04-20131009	10/17/2013	Dibenzofuran		TRG	N	U	0.62	9.6	0.59	ug/l	U
MB-MW-04-20131009	10/17/2013	2,4-Dichlorophenol		TRG	N	U	0.33	1.9	0.32	ug/l	U
MB-MW-04-20131009	10/17/2013	bis(2-Chloroethoxy)methane		TRG	N	U	0.58	9.6	0.56	ug/l	U
MB-MW-04-20131009	10/17/2013	Phenol		TRG	N	U	0.58	1.9	0.56	ug/l	U
MB-MW-04-20131009	10/17/2013	4-Chloroaniline		TRG	N	U	0.89	9.6	0.85	ug/l	U
MB-MW-04-20131009	10/17/2013	2,4-Dimethylphenol		TRG	N	U	0.85	9.6	0.82	ug/l	U
MB-MW-04-20131009	10/17/2013	Caprolactam		TRG	N	U	12	48	11	ug/l	U
MB-MW-04-20131009	10/17/2013	4-Bromophenyl-phenyl ether		TRG	N	U	0.64	9.6	0.61	ug/l	U
MB-MW-04-20131009	10/17/2013	Benzaldehyde		TRG	N	U	1.5	9.6	1.4	ug/l	U
MB-MW-04-20131009	10/17/2013	4-Nitrophenol		TRG	N	U	6.5	48	6.2	ug/l	U
MB-MW-04-20131009	10/17/2013	4-Nitroaniline		TRG	N	U	1.7	48	1.7	ug/l	U
MB-MW-04-20131009	10/17/2013	Atrazine		TRG	N	U	0.89	9.6	0.86	ug/l	U
MB-MW-04-20131009	10/17/2013	bis(2-Chloroethyl) ether		TRG	N	U	0.25	1.9	0.24	ug/l	U
MB-MW-04-20131009	10/17/2013	2-Methylnaphthalene		TRG	N	U	0.12	1.9	0.12	ug/l	U
MB-MW-04-20131009	10/17/2013	Di-n-butylphthalate		TRG	N	U	1.2	9.6	1.2	ug/l	U
MB-MW-04-20131009	10/17/2013	Phenanthrene		TRG	N	U	0.43	1.9	0.41	ug/l	U
MB-MW-04-20131009	10/17/2013	Butylbenzylphthalate		TRG	N	U	1.4	9.6	1.4	ug/l	U
MB-MW-04-20131009	10/17/2013	N-Nitrosodiphenylamine		TRG	N	U	0.85	9.6	0.82	ug/l	U
MB-MW-04-20131009	10/17/2013	Fluorene	0.56	TRG	Y	J	0.22	1.9	0.21	ug/l	J

sys_sample_code	Analysis date	chemical_name	result_ value	result_type_ code	detect _flag	lab_ qualifiers	method_detection _limit	reporting_detection _limit	quantitation _limit	result_ unit	validator_ qualifiers
MB-MW-04-20131009	10/17/2013	Carbazole		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-MW-04-20131009	10/17/2013	Hexachlorobutadiene		TRG	N	U	0.17	1.9	0.16	ug/l	U
MB-MW-04-20131009	10/17/2013	Pentachlorophenol		TRG	N	U	0.66	9.6	0.64	ug/l	U
MB-MW-04-20131009	10/17/2013	2,4,6-Trichlorophenol		TRG	N	U	1.7	9.6	1.7	ug/l	U
MB-MW-04-20131009	10/17/2013	2-Nitroaniline		TRG	N	U	3.5	48	3.4	ug/l	U
MB-MW-04-20131009	10/17/2013	Diethylphthalate		TRG	N	U	1.5	9.6	1.4	ug/l	U
MB-MW-04-20131009	10/17/2013	Naphthalene		TRG	N	U	0.14	1.9	0.13	ug/l	U
MB-MW-04-20131009	10/17/2013	Nitrobenzene		TRG	N	U	0.84	19	0.81	ug/l	U
MB-MW-04-20131009	10/17/2013	2-Chloronaphthalene		TRG	N	U	0.15	1.9	0.15	ug/l	U
MB-MW-04-20131009	10/17/2013	3,3'-Dichlorobenzidine		TRG	N	U	1.1	9.6	1.1	ug/l	U
MB-MW-04-20131009	10/17/2013	Biphenyl		TRG	N	U	0.42	9.6	0.4	ug/l	U
MB-MW-04-20131009	10/17/2013	2-Methylphenol		TRG	N	U	0.86	9.6	0.83	ug/l	U
MB-MW-04-20131009	10/17/2013	2-Chlorophenol		TRG	N	U	1.7	9.6	1.6	ug/l	U
MB-MW-04-20131009	10/17/2013	2,4,5-Trichlorophenol		TRG	N	U	1.5	9.6	1.5	ug/l	U
MB-MW-04-20131009	10/17/2013	Acetophenone		TRG	N	U	0.8	9.6	0.77	ug/l	U
MB-MW-04-20131009	10/17/2013	3-Nitroaniline		TRG	N	U	3.2	48	3.1	ug/l	U
MB-MW-04-20131009	10/17/2013	Benzo(g,h,i)perylene		TRG	N	U	0.15	1.9	0.15	ug/l	U
MB-MW-04-20131009	10/17/2013	Acenaphthylene		TRG	N	U	0.15	1.9	0.15	ug/l	U
MB-MW-04-20131009	10/17/2013	2-Nitrophenol		TRG	N	U	1.7	9.6	1.6	ug/l	U
MB-MW-04-20131009	10/17/2013	Indeno(1,2,3-cd)pyrene		TRG	N	U	0.2	1.9	0.19	ug/l	U
MB-MW-04-20131009	10/17/2013	Fluoranthene		TRG	N	U	0.16	1.9	0.16	ug/l	U
MB-MW-04-20131009	10/17/2013	Acenaphthene	1.3	TRG	Y	J	0.14	1.9	0.14	ug/l	J
MB-MW-04-20131009	10/17/2013	Benzo(k)fluoranthene		TRG	N	U	0.55	1.9	0.53	ug/l	U
MB-MW-04-20131009	10/17/2013	Chrysene		TRG	N	U	0.14	1.9	0.13	ug/l	U
MB-MW-04-20131009	10/17/2013	Benzo(b)fluoranthene		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-MW-04-20131009	10/17/2013	3&4-Methylphenol		TRG	N	U	0.9	9.6	0.87	ug/l	U
MB-MW-04-20131009	10/17/2013	Benzo(a)pyrene		TRG	N	U	0.13	1.9	0.13	ug/l	U
MB-MW-04-20131009	10/17/2013	2,4-Dinitrophenol		TRG	N	U	6.1	48	5.9	ug/l	U
MB-MW-04-20131009	10/17/2013	Hexachloroethane		TRG	N	U	0.63	9.6	0.6	ug/l	U
MB-MW-04-20131009	10/17/2013	Isophorone		TRG	N	U	0.64	9.6	0.62	ug/l	U
MB-MW-04-20131009	10/17/2013	Hexachlorocyclopentadiene		TRG	N	U	0.52	9.6	0.5	ug/l	U
MB-MW-04-20131009	10/17/2013	4-Chlorophenyl-phenyl ether		TRG	N	U	0.5	9.6	0.48	ug/l	U
MB-MW-04-20131009	10/17/2013	4,6-Dinitro-2-methylphenol		TRG	N	U	2.2	48	2.1	ug/l	U
MB-MW-04-20131009	10/17/2013	N-Nitroso-di-n-propylamine		TRG	N	U	0.31	1.9	0.3	ug/l	U
MB-MW-04-20131009	10/17/2013	2,6-Dinitrotoluene		TRG	N	U	0.8	9.6	0.77	ug/l	U
MB-MW-04-20131009	10/17/2013	4-Chloro-3-methylphenol		TRG	N	U	0.75	9.6	0.73	ug/l	U
MB-MW-04-20131009	10/17/2013	Benzo(a)anthracene		TRG	N	U	0.15	1.9	0.14	ug/l	U
MB-MW-04-20131009	10/17/2013	Dibenz(a,h)anthracene		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-MW-06-20131010	10/21/2013	Aroclor-1016		TRG	N	U	0.0025	0.0094	0.0024	ug/l	UL
MB-MW-06-20131010	10/21/2013	Aroclor-1254		TRG	N	U	0.0023	0.0094	0.0022	ug/l	UL
MB-MW-06-20131010	10/21/2013	Aroclor-1242	0.015	TRG	Y		0.0019	0.0094	0.0018	ug/l	J
MB-MW-06-20131010	10/21/2013	Aroclor-1262		TRG	N	U	0.0021	0.0094	0.0019	ug/l	UL
MB-MW-06-20131010	10/21/2013	Aroclor-1260		TRG	N	U	0.0014	0.0094	0.0013	ug/l	UL
MB-MW-06-20131010	10/21/2013	Aroclor-1232		TRG	N	U	0.0029	0.0094	0.0028	ug/l	UL
MB-MW-06-20131010	10/21/2013	Aroclor-1268		TRG	N	U	0.0027	0.0094	0.0026	ug/l	UL
MB-MW-06-20131010	10/21/2013	PCBs (total)	0.015	TRG	Y		0.0029	0.0094	0.0028	ug/l	J
MB-MW-06-20131010	10/21/2013	Aroclor-1248		TRG	N	U	0.0023	0.0094	0.0021	ug/l	U
MB-MW-06-20131010	10/21/2013	Aroclor-1221		TRG	N	U	0.0025	0.0094	0.0023	ug/l	U

sys_sample_code	Analysis date	chemical_name	result_ value	result_type_ code	detect _flag	lab_ qualifiers	method_detection _limit	reporting_detection _limit	quantitation _limit	result_ unit	validator_ qualifiers
MB-MW-06-20131010	10/18/2013	2,6-Dinitrotoluene		TRG	N	U	0.8	9.7	0.77	ug/l	U
MB-MW-06-20131010	10/18/2013	Fluorene		TRG	N	U	0.22	1.9	0.21	ug/l	U
MB-MW-06-20131010	10/18/2013	N-Nitrosodiphenylamine		TRG	N	U	0.85	9.7	0.83	ug/l	U
MB-MW-06-20131010	10/18/2013	Butylbenzylphthalate		TRG	N	U	1.4	9.7	1.4	ug/l	U
MB-MW-06-20131010	10/18/2013	Phenanthrene		TRG	N	U	0.43	1.9	0.41	ug/l	U
MB-MW-06-20131010	10/18/2013	Di-n-butylphthalate		TRG	N	U	1.2	9.7	1.2	ug/l	U
MB-MW-06-20131010	10/18/2013	Diethylphthalate		TRG	N	U	1.5	9.7	1.4	ug/l	U
MB-MW-06-20131010	10/18/2013	Hexachlorocyclopentadiene		TRG	N	U	0.52	9.7	0.5	ug/l	U
MB-MW-06-20131010	10/18/2013	4-Chlorophenyl-phenyl ether		TRG	N	U	0.5	9.7	0.49	ug/l	U
MB-MW-06-20131010	10/18/2013	N-Nitroso-di-n-propylamine		TRG	N	U	0.31	1.9	0.3	ug/l	U
MB-MW-06-20131010	10/18/2013	4,6-Dinitro-2-methylphenol		TRG	N	U	2.2	49	2.1	ug/l	U
MB-MW-06-20131010	10/18/2013	Dibenz(a,h)anthracene		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-MW-06-20131010	10/18/2013	4-Chloro-3-methylphenol		TRG	N	U	0.75	9.7	0.73	ug/l	U
MB-MW-06-20131010	10/18/2013	Benzo(a)anthracene		TRG	N	U	0.15	1.9	0.14	ug/l	U
MB-MW-06-20131010	10/18/2013	Carbazole		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-MW-06-20131010	10/18/2013	Hexachloroethane		TRG	N	U	0.63	9.7	0.61	ug/l	U
MB-MW-06-20131010	10/18/2013	3,3'-Dichlorobenzidine		TRG	N	U	1.1	9.7	1.1	ug/l	U
MB-MW-06-20131010	10/18/2013	3-Nitroaniline		TRG	N	U	3.2	49	3.1	ug/l	U
MB-MW-06-20131010	10/18/2013	Acenaphthene	1.7	TRG	Y	J	0.14	1.9	0.14	ug/l	J
MB-MW-06-20131010	10/18/2013	Acenaphthylene		TRG	N	U	0.15	1.9	0.15	ug/l	U
MB-MW-06-20131010	10/18/2013	2,4-Dinitrophenol		TRG	N	U	6.1	49	6	ug/l	U
MB-MW-06-20131010	10/18/2013	Nitrobenzene		TRG	N	U	0.84	19	0.82	ug/l	U
MB-MW-06-20131010	10/18/2013	2,4,5-Trichlorophenol		TRG	N	U	1.5	9.7	1.5	ug/l	U
MB-MW-06-20131010	10/18/2013	2-Chlorophenol		TRG	N	U	1.7	9.7	1.6	ug/l	U
MB-MW-06-20131010	10/18/2013	Acetophenone		TRG	N	U	0.8	9.7	0.78	ug/l	U
MB-MW-06-20131010	10/18/2013	Biphenyl		TRG	N	U	0.42	9.7	0.4	ug/l	U
MB-MW-06-20131010	10/18/2013	Hexachlorobutadiene		TRG	N	U	0.17	1.9	0.16	ug/l	U
MB-MW-06-20131010	10/18/2013	2-Chloronaphthalene		TRG	N	U	0.15	1.9	0.15	ug/l	U
MB-MW-06-20131010	10/18/2013	2-Methylnaphthalene		TRG	N	U	0.12	1.9	0.12	ug/l	U
MB-MW-06-20131010	10/18/2013	Naphthalene		TRG	N	U	0.14	1.9	0.14	ug/l	U
MB-MW-06-20131010	10/18/2013	2-Nitrophenol		TRG	N	U	1.7	9.7	1.7	ug/l	U
MB-MW-06-20131010	10/18/2013	2-Nitroaniline		TRG	N	U	3.5	49	3.4	ug/l	U
MB-MW-06-20131010	10/18/2013	Isophorone		TRG	N	U	0.64	9.7	0.63	ug/l	U
MB-MW-06-20131010	10/18/2013	2,4,6-Trichlorophenol		TRG	N	U	1.7	9.7	1.7	ug/l	U
MB-MW-06-20131010	10/18/2013	Pentachlorophenol		TRG	N	U	0.66	9.7	0.64	ug/l	U
MB-MW-06-20131010	10/18/2013	2-Methylphenol		TRG	N	U	0.86	9.7	0.84	ug/l	U
MB-MW-06-20131010	10/18/2013	2,4-Dimethylphenol		TRG	N	U	0.85	9.7	0.83	ug/l	U
MB-MW-06-20131010	10/18/2013	Hexachlorobenzene		TRG	N	U	0.18	1.9	0.18	ug/l	U
MB-MW-06-20131010	10/18/2013	Benzo(a)pyrene		TRG	N	U	0.13	1.9	0.13	ug/l	U
MB-MW-06-20131010	10/18/2013	bis(2-Ethylhexyl)phthalate		TRG	N	U	13	19	12	ug/l	U
MB-MW-06-20131010	10/18/2013	bis(2-Chloroethoxy)methane		TRG	N	U	0.58	9.7	0.56	ug/l	U
MB-MW-06-20131010	10/18/2013	bis(2-Chloroethyl) ether		TRG	N	U	0.25	1.9	0.24	ug/l	U
MB-MW-06-20131010	10/18/2013	Phenol		TRG	N	U	0.58	1.9	0.56	ug/l	U
MB-MW-06-20131010	10/18/2013	Anthracene		TRG	N	U	0.15	1.9	0.15	ug/l	U
MB-MW-06-20131010	10/18/2013	4-Chloroaniline		TRG	N	U	0.89	9.7	0.86	ug/l	U
MB-MW-06-20131010	10/18/2013	Caprolactam		TRG	N	U	12	49	12	ug/l	U
MB-MW-06-20131010	10/18/2013	4-Bromophenyl-phenyl ether		TRG	N	U	0.64	9.7	0.62	ug/l	U
MB-MW-06-20131010	10/18/2013	Benzaldehyde		TRG	N	U	1.5	9.7	1.5	ug/l	U

sys_sample_code	Analysis date	chemical_name	result_ value	result_type_ code	detect _flag	lab_ qualifiers	method_detection _limit	reporting_detection _limit	quantitation _limit	result_ unit	validator_ qualifiers
MB-MW-06-20131010	10/18/2013	4-Nitrophenol		TRG	N	U	6.5	49	6.3	ug/l	U
MB-MW-06-20131010	10/18/2013	4-Nitroaniline		TRG	N	U	1.7	49	1.7	ug/l	U
MB-MW-06-20131010	10/18/2013	2,2'-oxybis(1-Chloropropane)		TRG	N	U	0.2	1.9	0.19	ug/l	U
MB-MW-06-20131010	10/18/2013	Fluoranthene		TRG	N	U	0.16	1.9	0.16	ug/l	U
MB-MW-06-20131010	10/18/2013	3&4-Methylphenol		TRG	N	U	0.9	9.7	0.88	ug/l	U
MB-MW-06-20131010	10/18/2013	Di-n-octylphthalate		TRG	N	U	2.1	9.7	2	ug/l	U
MB-MW-06-20131010	10/18/2013	Benzo(k)fluoranthene		TRG	N	U	0.55	1.9	0.53	ug/l	U
MB-MW-06-20131010	10/18/2013	2,4-Dichlorophenol		TRG	N	U	0.33	1.9	0.32	ug/l	U
MB-MW-06-20131010	10/18/2013	Benzo(b)fluoranthene		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-MW-06-20131010	10/18/2013	Indeno(1,2,3-cd)pyrene		TRG	N	U	0.2	1.9	0.19	ug/l	U
MB-MW-06-20131010	10/18/2013	Benzo(g,h,i)perylene		TRG	N	U	0.15	1.9	0.15	ug/l	U
MB-MW-06-20131010	10/18/2013	Atrazine		TRG	N	U	0.89	9.7	0.87	ug/l	U
MB-MW-06-20131010	10/18/2013	Dibenzofuran		TRG	N	U	0.62	9.7	0.6	ug/l	U
MB-MW-06-20131010	10/18/2013	Dimethylphthalate		TRG	N	U	0.77	9.7	0.74	ug/l	U
MB-MW-06-20131010	10/18/2013	Pyrene		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-MW-06-20131010	10/18/2013	2,4-Dinitrotoluene		TRG	N	U	0.54	9.7	0.52	ug/l	U
MB-MW-06-20131010	10/18/2013	Chrysene		TRG	N	U	0.14	1.9	0.14	ug/l	U
DUP-20131009	10/20/2013	Aroclor-1248		TRG	N	U	0.0023	0.0096	0.0022	ug/l	U
DUP-20131009	10/20/2013	PCBs (total)		TRG	N	U	0.0029	0.0096	0.0028	ug/l	U
DUP-20131009	10/20/2013	Aroclor-1242		TRG	N	U	0.0019	0.0096	0.0018	ug/l	UJ
DUP-20131009	10/20/2013	Aroclor-1262		TRG	N	U	0.0021	0.0096	0.002	ug/l	U
DUP-20131009	10/20/2013	Aroclor-1016		TRG	N	U	0.0025	0.0096	0.0024	ug/l	U
DUP-20131009	10/20/2013	Aroclor-1221		TRG	N	U	0.0025	0.0096	0.0024	ug/l	U
DUP-20131009	10/20/2013	Aroclor-1268		TRG	N	U	0.0027	0.0096	0.0026	ug/l	U
DUP-20131009	10/20/2013	Aroclor-1254		TRG	N	U	0.0023	0.0096	0.0022	ug/l	U
DUP-20131009	10/20/2013	Aroclor-1260		TRG	N	U	0.0014	0.0096	0.0013	ug/l	U
DUP-20131009	10/20/2013	Aroclor-1232		TRG	N	U	0.0029	0.0096	0.0028	ug/l	U
DUP-20131009	10/17/2013	Hexachloroethane		TRG	N	U	0.63	9.6	0.6	ug/l	U
DUP-20131009	10/17/2013	N-Nitrosodiphenylamine		TRG	N	U	0.85	9.6	0.82	ug/l	U
DUP-20131009	10/17/2013	Butylbenzylphthalate		TRG	N	U	1.4	9.6	1.4	ug/l	U
DUP-20131009	10/17/2013	Phenanthrene		TRG	N	U	0.43	1.9	0.41	ug/l	U
DUP-20131009	10/17/2013	Di-n-butylphthalate		TRG	N	U	1.2	9.6	1.2	ug/l	U
DUP-20131009	10/17/2013	Diethylphthalate		TRG	N	U	1.5	9.6	1.4	ug/l	U
DUP-20131009	10/17/2013	Acenaphthene	3.5	TRG	Y		0.14	1.9	0.14	ug/l	J
DUP-20131009	10/17/2013	Isophorone		TRG	N	U	0.64	9.6	0.62	ug/l	U
DUP-20131009	10/17/2013	Fluorene	1.8	TRG	Y	J	0.22	1.9	0.21	ug/l	J
DUP-20131009	10/17/2013	4-Chlorophenyl-phenyl ether		TRG	N	U	0.5	9.6	0.48	ug/l	U
DUP-20131009	10/17/2013	2,4,6-Trichlorophenol		TRG	N	U	1.7	9.6	1.7	ug/l	U
DUP-20131009	10/17/2013	N-Nitroso-di-n-propylamine		TRG	N	U	0.31	1.9	0.3	ug/l	U
DUP-20131009	10/17/2013	2,6-Dinitrotoluene		TRG	N	U	0.8	9.6	0.77	ug/l	U
DUP-20131009	10/17/2013	4-Chloro-3-methylphenol		TRG	N	U	0.75	9.6	0.73	ug/l	U
DUP-20131009	10/17/2013	Benzo(a)anthracene		TRG	N	U	0.15	1.9	0.14	ug/l	U
DUP-20131009	10/17/2013	Dibenz(a,h)anthracene		TRG	N	U	0.16	1.9	0.15	ug/l	U
DUP-20131009	10/17/2013	4,6-Dinitro-2-methylphenol		TRG	N	U	2.2	48	2.1	ug/l	U
DUP-20131009	10/17/2013	Hexachlorocyclopentadiene		TRG	N	U	0.52	9.6	0.5	ug/l	U
DUP-20131009	10/17/2013	Biphenyl		TRG	N	U	0.42	9.6	0.4	ug/l	U
DUP-20131009	10/17/2013	Benzo(b)fluoranthene		TRG	N	U	0.16	1.9	0.15	ug/l	U
DUP-20131009	10/17/2013	2,4-Dinitrophenol		TRG	N	U	6.1	48	5.9	ug/l	U

sys_sample_code	Analysis date	chemical_name	result_ value	result_type_ code	detect _flag	lab_ qualifiers	method_detection _limit	reporting_detection _limit	quantitation _limit	result_ unit	validator_ qualifiers
DUP-20131009	10/17/2013	3-Nitroaniline		TRG	N	U	3.2	48	3.1	ug/l	U
DUP-20131009	10/17/2013	Nitrobenzene		TRG	N	U	0.84	19	0.81	ug/l	U
DUP-20131009	10/17/2013	Acetophenone		TRG	N	U	0.8	9.6	0.77	ug/l	U
DUP-20131009	10/17/2013	2,4,5-Trichlorophenol		TRG	N	U	1.5	9.6	1.5	ug/l	U
DUP-20131009	10/17/2013	Hexachlorobutadiene		TRG	N	U	0.17	1.9	0.16	ug/l	U
DUP-20131009	10/17/2013	2-Methylphenol		TRG	N	U	0.86	9.6	0.83	ug/l	U
DUP-20131009	10/17/2013	Carbazole		TRG	N	U	0.16	1.9	0.15	ug/l	U
DUP-20131009	10/17/2013	3,3'-Dichlorobenzidine		TRG	N	U	1.1	9.6	1.1	ug/l	U
DUP-20131009	10/17/2013	2-Chloronaphthalene		TRG	N	U	0.15	1.9	0.15	ug/l	U
DUP-20131009	10/17/2013	2-Methylnaphthalene		TRG	N	U	0.12	1.9	0.12	ug/l	U
DUP-20131009	10/17/2013	Naphthalene		TRG	N	U	0.14	1.9	0.13	ug/l	U
DUP-20131009	10/17/2013	2-Nitrophenol		TRG	N	U	1.7	9.6	1.6	ug/l	U
DUP-20131009	10/17/2013	2-Nitroaniline		TRG	N	U	3.5	48	3.4	ug/l	U
DUP-20131009	10/17/2013	Pentachlorophenol		TRG	N	U	0.66	9.6	0.64	ug/l	U
DUP-20131009	10/17/2013	2-Chlorophenol		TRG	N	U	1.7	9.6	1.6	ug/l	U
DUP-20131009	10/17/2013	4-Chloroaniline		TRG	N	U	0.89	9.6	0.85	ug/l	U
DUP-20131009	10/17/2013	Anthracene	0.53	TRG	Y	J	0.15	1.9	0.15	ug/l	J
DUP-20131009	10/17/2013	Hexachlorobenzene		TRG	N	U	0.18	1.9	0.18	ug/l	U
DUP-20131009	10/17/2013	Di-n-octylphthalate		TRG	N	U	2.1	9.6	2	ug/l	U
DUP-20131009	10/17/2013	bis(2-Ethylhexyl)phthalate		TRG	N	U	13	19	12	ug/l	U
DUP-20131009	10/17/2013	bis(2-Chloroethoxy)methane		TRG	N	U	0.58	9.6	0.56	ug/l	U
DUP-20131009	10/17/2013	bis(2-Chloroethyl) ether		TRG	N	U	0.25	1.9	0.24	ug/l	U
DUP-20131009	10/17/2013	2,4-Dinitrotoluene		TRG	N	U	0.54	9.6	0.52	ug/l	U
DUP-20131009	10/17/2013	2,2'-oxybis(1-Chloropropane)		TRG	N	U	0.2	1.9	0.19	ug/l	U
DUP-20131009	10/17/2013	2,4-Dichlorophenol		TRG	N	U	0.33	1.9	0.32	ug/l	U
DUP-20131009	10/17/2013	2,4-Dimethylphenol		TRG	N	U	0.85	9.6	0.82	ug/l	U
DUP-20131009	10/17/2013	Caprolactam		TRG	N	U	12	48	11	ug/l	U
DUP-20131009	10/17/2013	4-Bromophenyl-phenyl ether		TRG	N	U	0.64	9.6	0.61	ug/l	U
DUP-20131009	10/17/2013	Benzaldehyde		TRG	N	U	1.5	9.6	1.4	ug/l	U
DUP-20131009	10/17/2013	4-Nitrophenol		TRG	N	U	6.5	48	6.2	ug/l	U
DUP-20131009	10/17/2013	4-Nitroaniline		TRG	N	U	1.7	48	1.7	ug/l	U
DUP-20131009	10/17/2013	Phenol		TRG	N	U	0.58	1.9	0.56	ug/l	U
DUP-20131009	10/17/2013	Benzo(a)pyrene		TRG	N	U	0.13	1.9	0.13	ug/l	U
DUP-20131009	10/17/2013	3&4-Methylphenol		TRG	N	U	0.9	9.6	0.87	ug/l	U
DUP-20131009	10/17/2013	Acenaphthylene		TRG	N	U	0.15	1.9	0.15	ug/l	U
DUP-20131009	10/17/2013	Pyrene		TRG	N	U	0.16	1.9	0.15	ug/l	U
DUP-20131009	10/17/2013	Fluoranthene		TRG	N	U	0.16	1.9	0.16	ug/l	U
DUP-20131009	10/17/2013	Benzo(k)fluoranthene		TRG	N	U	0.55	1.9	0.53	ug/l	U
DUP-20131009	10/17/2013	Indeno(1,2,3-cd)pyrene		TRG	N	U	0.2	1.9	0.19	ug/l	U
DUP-20131009	10/17/2013	Benzo(g,h,i)perylene		TRG	N	U	0.15	1.9	0.15	ug/l	U
DUP-20131009	10/17/2013	Atrazine		TRG	N	U	0.89	9.6	0.86	ug/l	U
DUP-20131009	10/17/2013	Dibenzofuran		TRG	N	U	0.62	9.6	0.59	ug/l	U
DUP-20131009	10/17/2013	Dimethylphthalate		TRG	N	U	0.77	9.6	0.74	ug/l	U
DUP-20131009	10/17/2013	Chrysene		TRG	N	U	0.14	1.9	0.13	ug/l	U
MB-MW-05-20131010	10/20/2013	Aroclor-1254		TRG	N	U	0.0023	0.0095	0.0022	ug/l	U
MB-MW-05-20131010	10/20/2013	PCBs (total)		TRG	N	U	0.0029	0.0095	0.0028	ug/l	U
MB-MW-05-20131010	10/20/2013	Aroclor-1242		TRG	N	U	0.0019	0.0095	0.0018	ug/l	U
MB-MW-05-20131010	10/20/2013	Aroclor-1262		TRG	N	U	0.0021	0.0095	0.002	ug/l	U

sys_sample_code	Analysis date	chemical_name	result_ value	result_type_ code	detect _flag	lab_ qualifiers	method_detection _limit	reporting_detection _limit	quantitation _limit	result_ unit	validator_ qualifiers
MB-MW-05-20131010	10/20/2013	Aroclor-1260		TRG	N	U	0.0014	0.0095	0.0013	ug/l	U
MB-MW-05-20131010	10/20/2013	Aroclor-1248		TRG	N	U	0.0023	0.0095	0.0022	ug/l	U
MB-MW-05-20131010	10/20/2013	Aroclor-1232		TRG	N	U	0.0029	0.0095	0.0028	ug/l	U
MB-MW-05-20131010	10/20/2013	Aroclor-1221		TRG	N	U	0.0025	0.0095	0.0024	ug/l	U
MB-MW-05-20131010	10/20/2013	Aroclor-1268		TRG	N	U	0.0027	0.0095	0.0026	ug/l	U
MB-MW-05-20131010	10/20/2013	Aroclor-1016		TRG	N	U	0.0025	0.0095	0.0024	ug/l	U
MB-MW-05-20131010	10/18/2013	Anthracene	5.5	TRG	Y		0.15	1.9	0.15	ug/l	
MB-MW-05-20131010	10/18/2013	2,4-Dichlorophenol		TRG	N	U	0.33	1.9	0.32	ug/l	U
MB-MW-05-20131010	10/18/2013	2,4-Dinitrotoluene		TRG	N	U	0.54	9.6	0.52	ug/l	U
MB-MW-05-20131010	10/18/2013	Pyrene	3.4	TRG	Y		0.16	1.9	0.15	ug/l	
MB-MW-05-20131010	10/18/2013	Hexachlorobenzene		TRG	N	U	0.18	1.9	0.18	ug/l	U
MB-MW-05-20131010	10/18/2013	Dibenzofuran	33	TRG	Y		0.62	9.6	0.59	ug/l	
MB-MW-05-20131010	10/18/2013	bis(2-Chloroethyl) ether		TRG	N	U	0.25	1.9	0.24	ug/l	U
MB-MW-05-20131010	10/18/2013	Terphenyl-d14	53	SUR	Y		0	0	0	ug/l	
MB-MW-05-20131010	10/18/2013	Atrazine		TRG	N	U	0.89	9.6	0.86	ug/l	U
MB-MW-05-20131010	10/18/2013	Benzo(g,h,i)perylene		TRG	N	U	0.15	1.9	0.15	ug/l	U
MB-MW-05-20131010	10/18/2013	Indeno(1,2,3-cd)pyrene		TRG	N	U	0.2	1.9	0.19	ug/l	U
MB-MW-05-20131010	10/18/2013	Benzo(b)fluoranthene		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-MW-05-20131010	10/18/2013	Dimethylphthalate		TRG	N	U	0.77	9.6	0.74	ug/l	U
MB-MW-05-20131010	10/18/2013	Di-n-octylphthalate		TRG	N	U	2.1	9.6	2	ug/l	U
MB-MW-05-20131010	10/18/2013	bis(2-Chloroethoxy)methane		TRG	N	U	0.58	9.6	0.56	ug/l	U
MB-MW-05-20131010	10/18/2013	Phenol		TRG	N	U	0.58	1.9	0.56	ug/l	U
MB-MW-05-20131010	10/18/2013	2,2'-oxybis(1-Chloropropane)		TRG	N	U	0.2	1.9	0.19	ug/l	U
MB-MW-05-20131010	10/18/2013	4-Chloroaniline		TRG	N	U	0.89	9.6	0.85	ug/l	U
MB-MW-05-20131010	10/18/2013	2,4-Dimethylphenol	67	TRG	Y		0.85	9.6	0.82	ug/l	
MB-MW-05-20131010	10/18/2013	Caprolactam		TRG	N	U	12	48	11	ug/l	U
MB-MW-05-20131010	10/18/2013	4-Bromophenyl-phenyl ether		TRG	N	U	0.64	9.6	0.61	ug/l	U
MB-MW-05-20131010	10/18/2013	Benzaldehyde		TRG	N	U	1.5	9.6	1.4	ug/l	U
MB-MW-05-20131010	10/18/2013	4-Nitrophenol		TRG	N	U	6.5	48	6.2	ug/l	U
MB-MW-05-20131010	10/18/2013	4-Nitroaniline		TRG	N	U	1.7	48	1.7	ug/l	U
MB-MW-05-20131010	10/18/2013	Acenaphthylene	2	TRG	Y		0.15	1.9	0.15	ug/l	
MB-MW-05-20131010	10/18/2013	Benzo(k)fluoranthene		TRG	N	U	0.55	1.9	0.53	ug/l	U
MB-MW-05-20131010	10/18/2013	bis(2-Ethylhexyl)phthalate		TRG	N	U	13	19	12	ug/l	U
MB-MW-05-20131010	10/18/2013	Naphthalene	270	TRG	Y		0.14	1.9	0.13	ug/l	
MB-MW-05-20131010	10/18/2013	Phenanthrene	42	TRG	Y		0.43	1.9	0.41	ug/l	
MB-MW-05-20131010	10/18/2013	Butylbenzylphthalate		TRG	N	U	1.4	9.6	1.4	ug/l	U
MB-MW-05-20131010	10/18/2013	N-Nitrosodiphenylamine		TRG	N	U	0.85	9.6	0.82	ug/l	U
MB-MW-05-20131010	10/18/2013	Fluorene	41	TRG	Y		0.22	1.9	0.21	ug/l	
MB-MW-05-20131010	10/18/2013	Carbazole	44	TRG	Y		0.16	1.9	0.15	ug/l	
MB-MW-05-20131010	10/18/2013	Hexachlorobutadiene		TRG	N	U	0.17	1.9	0.16	ug/l	U
MB-MW-05-20131010	10/18/2013	Pentachlorophenol		TRG	N	U	0.66	9.6	0.64	ug/l	U
MB-MW-05-20131010	10/18/2013	2,4,6-Trichlorophenol		TRG	N	U	1.7	9.6	1.7	ug/l	U
MB-MW-05-20131010	10/18/2013	Di-n-butylphthalate		TRG	N	U	1.2	9.6	1.2	ug/l	U
MB-MW-05-20131010	10/18/2013	2-Nitrophenol		TRG	N	U	1.7	9.6	1.6	ug/l	U
MB-MW-05-20131010	10/18/2013	2-Methylphenol		TRG	N	U	0.86	9.6	0.83	ug/l	U
MB-MW-05-20131010	10/18/2013	2-Methylnaphthalene	44	TRG	Y		0.12	1.9	0.12	ug/l	
MB-MW-05-20131010	10/18/2013	2-Chloronaphthalene		TRG	N	U	0.15	1.9	0.15	ug/l	U
MB-MW-05-20131010	10/18/2013	3,3'-Dichlorobenzidine		TRG	N	U	1.1	9.6	1.1	ug/l	U

sys_sample_code	Analysis date	chemical_name	result_ value	result_type_ code	detect _flag	lab_ qualifiers	method_detection _limit	reporting_detection _limit	quantitation _limit	result_ unit	validator_ qualifiers
MB-MW-05-20131010	10/18/2013	Biphenyl	9.3	TRG	Y	J	0.42	9.6	0.4	ug/l	J
MB-MW-05-20131010	10/18/2013	2-Chlorophenol		TRG	N	U	1.7	9.6	1.6	ug/l	U
MB-MW-05-20131010	10/18/2013	Fluoranthene	7.5	TRG	Y		0.16	1.9	0.16	ug/l	
MB-MW-05-20131010	10/18/2013	Acetophenone		TRG	N	U	0.8	9.6	0.77	ug/l	U
MB-MW-05-20131010	10/18/2013	Nitrobenzene		TRG	N	U	0.84	19	0.81	ug/l	U
MB-MW-05-20131010	10/18/2013	3-Nitroaniline		TRG	N	U	3.2	48	3.1	ug/l	U
MB-MW-05-20131010	10/18/2013	2-Nitroaniline		TRG	N	U	3.5	48	3.4	ug/l	U
MB-MW-05-20131010	10/18/2013	2,4-Dinitrophenol		TRG	N	U	6.1	48	5.9	ug/l	U
MB-MW-05-20131010	10/18/2013	Diethylphthalate		TRG	N	U	1.5	9.6	1.4	ug/l	U
MB-MW-05-20131010	10/18/2013	2,4,5-Trichlorophenol		TRG	N	U	1.5	9.6	1.5	ug/l	U
MB-MW-05-20131010	10/18/2013	3&4-Methylphenol		TRG	N	U	0.9	9.6	0.87	ug/l	U
MB-MW-05-20131010	10/18/2013	Chrysene		TRG	N	U	0.14	1.9	0.13	ug/l	U
MB-MW-05-20131010	10/18/2013	Benzo(a)pyrene		TRG	N	U	0.13	1.9	0.13	ug/l	U
MB-MW-05-20131010	10/18/2013	4,6-Dinitro-2-methylphenol		TRG	N	U	2.2	48	2.1	ug/l	U
MB-MW-05-20131010	10/18/2013	Hexachloroethane		TRG	N	U	0.63	9.6	0.6	ug/l	U
MB-MW-05-20131010	10/18/2013	Acenaphthene	59	TRG	Y		0.14	1.9	0.14	ug/l	
MB-MW-05-20131010	10/18/2013	Isophorone		TRG	N	U	0.64	9.6	0.62	ug/l	U
MB-MW-05-20131010	10/18/2013	4-Chlorophenyl-phenyl ether		TRG	N	U	0.5	9.6	0.48	ug/l	U
MB-MW-05-20131010	10/18/2013	Dibenz(a,h)anthracene		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-MW-05-20131010	10/18/2013	N-Nitroso-di-n-propylamine		TRG	N	U	0.31	1.9	0.3	ug/l	U
MB-MW-05-20131010	10/18/2013	2,6-Dinitrotoluene		TRG	N	U	0.8	9.6	0.77	ug/l	U
MB-MW-05-20131010	10/18/2013	4-Chloro-3-methylphenol		TRG	N	U	0.75	9.6	0.73	ug/l	U
MB-MW-05-20131010	10/18/2013	Benzo(a)anthracene		TRG	N	U	0.15	1.9	0.14	ug/l	U
MB-MW-05-20131010	10/18/2013	Hexachlorocyclopentadiene		TRG	N	U	0.52	9.6	0.5	ug/l	U
MB-EB-20131010	10/20/2013	Aroclor-1016		TRG	N	U	0.0025	0.0094	0.0024	ug/l	U
MB-EB-20131010	10/20/2013	PCBs (total)		TRG	N	U	0.0029	0.0094	0.0028	ug/l	U
MB-EB-20131010	10/20/2013	Aroclor-1262		TRG	N	U	0.0021	0.0094	0.0019	ug/l	U
MB-EB-20131010	10/20/2013	Aroclor-1232		TRG	N	U	0.0029	0.0094	0.0028	ug/l	U
MB-EB-20131010	10/20/2013	Aroclor-1221		TRG	N	U	0.0025	0.0094	0.0023	ug/l	U
MB-EB-20131010	10/20/2013	Aroclor-1268		TRG	N	U	0.0027	0.0094	0.0026	ug/l	U
MB-EB-20131010	10/20/2013	Aroclor-1254		TRG	N	U	0.0023	0.0094	0.0022	ug/l	U
MB-EB-20131010	10/20/2013	Aroclor-1260		TRG	N	U	0.0014	0.0094	0.0013	ug/l	U
MB-EB-20131010	10/20/2013	Aroclor-1242		TRG	N	U	0.0019	0.0094	0.0018	ug/l	U
MB-EB-20131010	10/20/2013	Aroclor-1248		TRG	N	U	0.0023	0.0094	0.0021	ug/l	U
MB-EB-20131010	10/18/2013	Dibenzofuran		TRG	N	U	0.62	9.6	0.59	ug/l	U
MB-EB-20131010	10/18/2013	Anthracene		TRG	N	U	0.15	1.9	0.15	ug/l	U
MB-EB-20131010	10/18/2013	2,4-Dichlorophenol		TRG	N	U	0.33	1.9	0.32	ug/l	U
MB-EB-20131010	10/18/2013	2,4-Dinitrotoluene		TRG	N	U	0.54	9.6	0.52	ug/l	U
MB-EB-20131010	10/18/2013	Hexachlorobenzene		TRG	N	U	0.18	1.9	0.18	ug/l	U
MB-EB-20131010	10/18/2013	Dimethylphthalate		TRG	N	U	0.77	9.6	0.74	ug/l	U
MB-EB-20131010	10/18/2013	Phenol		TRG	N	U	0.58	1.9	0.56	ug/l	U
MB-EB-20131010	10/18/2013	Atrazine		TRG	N	U	0.89	9.6	0.86	ug/l	U
MB-EB-20131010	10/18/2013	Pyrene		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-EB-20131010	10/18/2013	Di-n-octylphthalate		TRG	N	U	2.1	9.6	2	ug/l	U
MB-EB-20131010	10/18/2013	bis(2-Ethylhexyl)phthalate		TRG	N	U	13	19	12	ug/l	U
MB-EB-20131010	10/18/2013	bis(2-Chloroethyl) ether		TRG	N	U	0.25	1.9	0.24	ug/l	U
MB-EB-20131010	10/18/2013	2,2'-oxybis(1-Chloropropane)		TRG	N	U	0.2	1.9	0.19	ug/l	U
MB-EB-20131010	10/18/2013	4-Chloroaniline		TRG	N	U	0.89	9.6	0.85	ug/l	U

sys_sample_code	Analysis date	chemical_name	result_ value	result_type_ code	detect _flag	lab_ qualifiers	method_detection _limit	reporting_detection _limit	quantitation _limit	result_ unit	validator_ qualifiers
MB-EB-20131010	10/18/2013	2,4-Dimethylphenol		TRG	N	U	0.85	9.6	0.82	ug/l	U
MB-EB-20131010	10/18/2013	Caprolactam		TRG	N	U	12	48	11	ug/l	U
MB-EB-20131010	10/18/2013	4-Bromophenyl-phenyl ether		TRG	N	U	0.64	9.6	0.61	ug/l	U
MB-EB-20131010	10/18/2013	Benzaldehyde		TRG	N	U	1.5	9.6	1.4	ug/l	U
MB-EB-20131010	10/18/2013	Benzo(g,h,i)perylene		TRG	N	U	0.15	1.9	0.15	ug/l	U
MB-EB-20131010	10/18/2013	4-Nitroaniline		TRG	N	U	1.7	48	1.7	ug/l	U
MB-EB-20131010	10/18/2013	bis(2-Chloroethoxy)methane		TRG	N	U	0.58	9.6	0.56	ug/l	U
MB-EB-20131010	10/18/2013	Naphthalene		TRG	N	U	0.14	1.9	0.13	ug/l	U
MB-EB-20131010	10/18/2013	Di-n-butylphthalate		TRG	N	U	1.2	9.6	1.2	ug/l	U
MB-EB-20131010	10/18/2013	Phenanthrene		TRG	N	U	0.43	1.9	0.41	ug/l	U
MB-EB-20131010	10/18/2013	Butylbenzylphthalate		TRG	N	U	1.4	9.6	1.4	ug/l	U
MB-EB-20131010	10/18/2013	N-Nitrosodiphenylamine		TRG	N	U	0.85	9.6	0.82	ug/l	U
MB-EB-20131010	10/18/2013	Fluorene		TRG	N	U	0.22	1.9	0.21	ug/l	U
MB-EB-20131010	10/18/2013	Carbazole		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-EB-20131010	10/18/2013	Hexachlorobutadiene		TRG	N	U	0.17	1.9	0.16	ug/l	U
MB-EB-20131010	10/18/2013	Pentachlorophenol		TRG	N	U	0.66	9.6	0.64	ug/l	U
MB-EB-20131010	10/18/2013	2,4,6-Trichlorophenol		TRG	N	U	1.7	9.6	1.7	ug/l	U
MB-EB-20131010	10/18/2013	Diethylphthalate		TRG	N	U	1.5	9.6	1.4	ug/l	U
MB-EB-20131010	10/18/2013	2-Nitrophenol		TRG	N	U	1.7	9.6	1.6	ug/l	U
MB-EB-20131010	10/18/2013	2-Methylphenol		TRG	N	U	0.86	9.6	0.83	ug/l	U
MB-EB-20131010	10/18/2013	2-Methylnaphthalene		TRG	N	U	0.12	1.9	0.12	ug/l	U
MB-EB-20131010	10/18/2013	2-Chloronaphthalene		TRG	N	U	0.15	1.9	0.15	ug/l	U
MB-EB-20131010	10/18/2013	3,3'-Dichlorobenzidine		TRG	N	U	1.1	9.6	1.1	ug/l	U
MB-EB-20131010	10/18/2013	Biphenyl		TRG	N	U	0.42	9.6	0.4	ug/l	U
MB-EB-20131010	10/18/2013	2-Chlorophenol		TRG	N	U	1.7	9.6	1.6	ug/l	U
MB-EB-20131010	10/18/2013	Acetophenone		TRG	N	U	0.8	9.6	0.77	ug/l	U
MB-EB-20131010	10/18/2013	Nitrobenzene		TRG	N	U	0.84	19	0.81	ug/l	U
MB-EB-20131010	10/18/2013	3-Nitroaniline		TRG	N	U	3.2	48	3.1	ug/l	U
MB-EB-20131010	10/18/2013	4-Nitrophenol		TRG	N	U	6.5	48	6.2	ug/l	U
MB-EB-20131010	10/18/2013	Indeno(1,2,3-cd)pyrene		TRG	N	U	0.2	1.9	0.19	ug/l	U
MB-EB-20131010	10/18/2013	2-Nitroaniline		TRG	N	U	3.5	48	3.4	ug/l	U
MB-EB-20131010	10/18/2013	2,4,5-Trichlorophenol		TRG	N	U	1.5	9.6	1.5	ug/l	U
MB-EB-20131010	10/18/2013	Benzo(k)fluoranthene		TRG	N	U	0.55	1.9	0.53	ug/l	U
MB-EB-20131010	10/18/2013	Acenaphthylene		TRG	N	U	0.15	1.9	0.15	ug/l	U
MB-EB-20131010	10/18/2013	Chrysene		TRG	N	U	0.14	1.9	0.13	ug/l	U
MB-EB-20131010	10/18/2013	Fluoranthene		TRG	N	U	0.16	1.9	0.16	ug/l	U
MB-EB-20131010	10/18/2013	Benzo(b)fluoranthene		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-EB-20131010	10/18/2013	3&4-Methylphenol		TRG	N	U	0.9	9.6	0.87	ug/l	U
MB-EB-20131010	10/18/2013	Acenaphthene		TRG	N	U	0.14	1.9	0.14	ug/l	U
MB-EB-20131010	10/18/2013	Benzo(a)pyrene		TRG	N	U	0.13	1.9	0.13	ug/l	U
MB-EB-20131010	10/18/2013	N-Nitroso-di-n-propylamine		TRG	N	U	0.31	1.9	0.3	ug/l	U
MB-EB-20131010	10/18/2013	Isophorone		TRG	N	U	0.64	9.6	0.62	ug/l	U
MB-EB-20131010	10/18/2013	Hexachlorocyclopentadiene		TRG	N	U	0.52	9.6	0.5	ug/l	U
MB-EB-20131010	10/18/2013	Hexachloroethane		TRG	N	U	0.63	9.6	0.6	ug/l	U
MB-EB-20131010	10/18/2013	2,4-Dinitrophenol		TRG	N	U	6.1	48	5.9	ug/l	U
MB-EB-20131010	10/18/2013	2,6-Dinitrotoluene		TRG	N	U	0.8	9.6	0.77	ug/l	U
MB-EB-20131010	10/18/2013	4-Chloro-3-methylphenol		TRG	N	U	0.75	9.6	0.73	ug/l	U
MB-EB-20131010	10/18/2013	Benzo(a)anthracene		TRG	N	U	0.15	1.9	0.14	ug/l	U

sys_sample_code	Analysis date	chemical_name	result_ value	result_type_ code	detect _flag	lab_ qualifiers	method_detection _limit	reporting_detection _limit	quantitation _limit	result_ unit	validator_ qualifiers
MB-EB-20131010	10/18/2013	Dibenz(a,h)anthracene		TRG	N	U	0.16	1.9	0.15	ug/l	U
MB-EB-20131010	10/18/2013	4,6-Dinitro-2-methylphenol		TRG	N	U	2.2	48	2.1	ug/l	U
MB-EB-20131010	10/18/2013	4-Chlorophenyl-phenyl ether		TRG	N	U	0.5	9.6	0.48	ug/l	U

SECTION 3

ORGANIC DATA SUPPORT DOCUMENTATION

Organic Analyses Support Documentation

Environmental Standards Project Name: Enviro-Sci Mobile Banks LTM9
Sample Collection Dates: 10/9 + 10/10
Job Number: 20158A3.000
Project Manager: STZ
Laboratory: TH Pittsburgh

Reviewed By: STZ
Approved By: SJC
Completion Date: 11/13

Applicable Sample No's.: [X] Refer to Table 1 in the Quality Assurance Review

Sample No.	Lab. Control No.

Deliverables:
- CLP-like [✓]
- Tier I [ ]
- Tier II [ ]
- Limited [ ]
- Other [ ]

The following table indicates criteria which were examined, the identified problems, and support documentation attachments.

	Criteria Examined in Detail: Check (✓) If Yes or Footnote Letter for Comments Below				Problems Identified: Check (✓) If Yes or Footnote Number for Comments Below				Support Documentation Attachments: Check (✓) If Yes -- or Identify Attachment No.			
	VOA Method	BNA Method 8270	PEST / PCB 8081	Other Method(s)	VOA Method	BNA Method 8270	PEST / PCB 8081	Other Method(s)	VOA Method	BNA Method 8270	PEST / PCB 8081	Other Method(s)
Holding Times		✓	✓							✓	✓	
Blank Analysis Results: Target Compounds		✓	✓							✓	✓	
Blank Analysis Results: TICs												
System Mntr. Cmpds. &/or Surrogate Spike Rslts.		✓	✓				✓			✓	✓	
Matrix Spike / Matrix Spike Duplicate Results		✓	✓			✓				✓	✓	
Blank Spike Results		✓	✓							✓	✓	
Duplicate Analysis Results [X] Field [ ] Lab		✓	✓			✓	✓			✓	✓	
Qualitative Identification: Target Compounds		✓	✓							✓	✓	
Qualitative Identification: TICs												
DFTPP & BFB Mass Tuning		✓								✓		
GC Instrument Performance			✓								✓	
Initial Calibrations		✓	✓							✓	✓	
Continuing Calibrations		✓	✓							✓	✓	
Quantitation of Results		✓	✓			✓				✓	✓	
DDT / Endrin Breakdown		✓								✓		
Surrogate Retention Time Shifts		✓	✓							✓	✓	
Internal Standards Performance		✓								✓		
Resolution Check Standards												
Analytical Sequence		✓	✓							✓	✓	
Florisil Cartridge Check & GPC Calibration												
GC Column Agreement												
Others:												

Comments: _____

BLANK ANALYSIS RESULTS FOR TARGET ORGANIC COMPOUNDS

Fraction (1)	Matrix (Aq., S)	Blank Type (2)	Blank Sample Number	Contaminant	Concentration (units)	Qualification Limit 5x	Qualification Limit 10x
S	Aq	MB	MB 180-86933/1-A	None Detected			
S	Aq	MB	MB 180-86993/1-A	None Detected			
S	Aq	EB	MB-EB-20131129	None Detected			
S	Aq	EB	MB-EB-20131210	None Detected			

1 – V = Volatile; S = Semivolatile; P = Pesticide/PCB; O = Other: _____

Aq. = Aqueous; S = Solid

2 – MB = Method Blank; TB = Trip Blank; EB = Equipment Rinse Blank; FB = Field Blank
IB = Instrument Blank; SB = Storage Blank

* = Inferred from instrument printouts and/or supporting data; mass spectra not provided.

+ = Contaminant observed on one column only.

Notes: _____

EVALUATION OF DUPLICATE ANALYSIS PRECISION

Units ug/L	PRECISION OBJECTIVES[1]	
	Analyte > or = 5 X RL	RPD < or = 30
	Analyte < 5 X RL	Difference < or = RL Times 1

ANALYTE	MB-MW-04-20131009 Analyte Concentration[2]	Qual	RL	DUP-20131009 Analyte Concentration[2]	Qual	RL	Difference	RPD	Notes
Aroclor-1242	0.095		0.0094	0.0018	U	0.0096	0.0932	NA	2
acenaphthene	1.3		1.9	3.5		1.9	2.2	NA	2
anthracene	0.35		1.9	0.53		1.9	0.18	NA	IN
fluoranthene	0.56		1.9	1.8		1.9	1.24	NA	IN
							NA	#DIV/0!	#DIV/0!
							NA	#DIV/0!	#DIV/0!
							NA	#DIV/0!	#DIV/0!
							NA	#DIV/0!	#DIV/0!
							NA	#DIV/0!	#DIV/0!
							NA	#DIV/0!	#DIV/0!
							NA	#DIV/0!	#DIV/0!
							NA	#DIV/0!	#DIV/0!
							NA	#DIV/0!	#DIV/0!
							NA	#DIV/0!	#DIV/0!
							NA	#DIV/0!	#DIV/0!
							NA	#DIV/0!	#DIV/0!
							NA	#DIV/0!	#DIV/0!

NOTES:

1) Enter the project-specific or default acceptance criteria

2) For not-detected results, enter the method detection limit in the Concentrations column and a "U" in the Qual column.

Qual) Column to enter J, U, U*, or B

RPD) Relative Percent Difference

RL) Reporting Limit

J) The analyte concentration should be considered estimated.

U) The analyte was not-detected in the sample. The numerical value will be used for comparison purposes.

U* or B) The result was blank qualified. The numerical value will be used for comparison purposes.

NA) The RPD or Difference is not applicable.

1) Both results are > or = 5 X RL and RPD over acceptance limit, flag positive results "J".

2) At least one of the results is < 5 X RL and difference is over acceptance limit, flag positive results "J" and "not-detected" results "UJ".

Comments:

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Rxi-5SilMS ID: 0.32 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
MB-MW-02-20131009	180-26012-1	52	52	57	51	70	36
MB-MW-01-20131009	180-26012-2	42	38	52	56	67	37
MB-MW-03-20131009	180-26012-3	46	43	55	57	63	36
MB-EB-20131009	180-26012-4	49	47	55	57	61	65
MB-MW-04-20131009	180-26012-5	46	43	54	59	71	36
MB-MW-06-20131010	180-26012-6	39	34	48	52	63	29
DUP-20131009	180-26012-7	46	43	56	58	68	31
MB-MW-05-20131010	180-26012-8	44	44	51	54	74	27
MB-EB-20131010	180-26012-9	52	52	59	59	68	75
	MB 180-86837/1-A	67	66	69	69	70	87
	MB 180-86943/1-A	61	60	59	63	69	81
	LCS 180-86837/2-A	63	62	60	66	73	84
	LCS 180-86943/2-A	62	59	58	61	70	78
	LCSD 180-86943/3-A	65	63	60	64	76	79
MB-MW-02-20131009 MS	180-26012-1 MS	49	48	53	47	64	30
MB-MW-02-20131009 MSD	180-26012-1 MSD	48	47	55	48	64	30

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	26-100
PHL = Phenol-d5 (Surr)	30-102
NBZ = Nitrobenzene-d5 (Surr)	37-104
FBP = 2-Fluorobiphenyl	35-108
TBP = 2,4,6-Tribromophenol (Surr)	33-122
TPH = Terphenyl-d14 (Surr)	25-130

Column to be used to flag recovery values

FORM II 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N1017006.D

Lab ID: LCS 180-86837/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acenaphthene	200	138	69	39-106	
Acenaphthylene	200	136	68	40-113	
Anthracene	200	137	69	37-108	
Benzo[a]anthracene	200	136	68	40-103	
Benzo[a]pyrene	200	136	68	37-105	
Benzo[b]fluoranthene	200	130	65	35-100	
Benzo[g,h,i]perylene	200	150	75	31-118	
Benzo[k]fluoranthene	200	135	67	37-108	
Bis(2-ethylhexyl) phthalate	200	152	76	35-112	
2,2'-oxybis[1-chloropropane]	200	101	51	30-100	
4-Bromophenyl phenyl ether	200	144	72	38-108	
Butyl benzyl phthalate	200	150	75	34-110	
Carbazole	200	131	66	35-113	
4-Chloroaniline	200	118	59	26-99	
2-Chloronaphthalene	200	125	62	37-102	
4-Chlorophenyl phenyl ether	200	140	70	39-107	
Chrysene	200	145	73	39-103	
Dibenz(a,h)anthracene	200	150	75	32-117	
Dibenzofuran	200	136	68	37-107	
Di-n-butyl phthalate	200	145	72	36-113	
3,3'-Dichlorobenzidine	200	150	75	11-106	
Diethyl phthalate	200	145	72	39-112	
Dimethyl phthalate	200	140	70	40-110	
2,4-Dinitrotoluene	200	142	71	41-117	
2,6-Dinitrotoluene	200	145	73	42-118	
Di-n-octyl phthalate	200	139	70	27-118	
Fluoranthene	200	142	71	35-111	
Fluorene	200	138	69	39-107	
Hexachlorobenzene	200	143	71	35-106	
Hexachlorobutadiene	200	133	66	30-103	
Hexachlorocyclopentadiene	200	139	70	19-116	
Hexachloroethane	200	121	60	27-94	
Indeno[1,2,3-cd]pyrene	200	142	71	32-116	
Isophorone	200	132	66	39-108	
2-Methylnaphthalene	200	127	63	36-101	
Naphthalene	200	125	63	35-98	
2-Nitroaniline	200	142	71	37-114	
3-Nitroaniline	200	136	68	32-117	
4-Nitroaniline	200	135	67	32-117	
4-Nitrophenol	400	299	75	29-120	
Nitrobenzene	200	123	61	37-103	
N-Nitrosodi-n-propylamine	200	126	63	37-106	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N1017006.D

Lab ID: LCS 180-86837/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
N-Nitrosodiphenylamine	200	140	70	34-108	
Phenanthrene	200	135	67	34-107	
Pyrene	200	141	70	36-115	
4-Chloro-3-methylphenol	200	134	67	40-107	
2-Chlorophenol	200	127	64	34-100	
2-Methylphenol	200	128	64	34-101	
Methylphenol, 3 & 4	200	128	64	34-104	
2,4-Dichlorophenol	200	133	66	34-106	
2,4-Dimethylphenol	200	140	70	34-98	
2,4-Dinitrophenol	400	266	66	3-125	
4,6-Dinitro-2-methylphenol	400	290	72	24-121	
2-Nitrophenol	200	134	67	33-108	
Pentachlorophenol	400	271	68	10-118	
Phenol	200	120	60	35-98	
2,4,5-Trichlorophenol	200	140	70	31-111	
2,4,6-Trichlorophenol	200	143	71	34-110	
Acetophenone	200	113	57	30-150	
Atrazine	200	126	63	30-150	
Benzaldehyde	200	183	92	30-150	
1,1'-Biphenyl	200	132	66	10-140	
Caprolactam	200	138	69	10-140	
Bis(2-chloroethoxy)methane	200	120	60	36-101	
Bis(2-chloroethyl)ether	200	120	60	34-96	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N1018003.D

Lab ID: LCS 180-86943/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acenaphthene	200	127	64	39-106	
Acenaphthylene	200	125	62	40-113	
Anthracene	200	123	62	37-108	
Benzo[a]anthracene	200	128	64	40-103	
Benzo[a]pyrene	200	123	61	37-105	
Benzo[b]fluoranthene	200	123	61	35-100	
Benzo[g,h,i]perylene	200	133	67	31-118	
Benzo[k]fluoranthene	200	118	59	37-108	
Bis(2-ethylhexyl) phthalate	200	141	70	35-112	
2,2'-oxybis[1-chloropropane]	200	95.2	48	30-100	
4-Bromophenyl phenyl ether	200	130	65	38-108	
Butyl benzyl phthalate	200	142	71	34-110	
Carbazole	200	122	61	35-113	
4-Chloroaniline	200	111	56	26-99	
2-Chloronaphthalene	200	110	55	37-102	
4-Chlorophenyl phenyl ether	200	131	65	39-107	
Chrysene	200	135	68	39-103	
Dibenz(a,h)anthracene	200	135	67	32-117	
Dibenzofuran	200	127	63	37-107	
Di-n-butyl phthalate	200	129	64	36-113	
3,3'-Dichlorobenzidine	200	126	63	11-106	
Diethyl phthalate	200	131	65	39-112	
Dimethyl phthalate	200	127	64	40-110	
2,4-Dinitrotoluene	200	131	66	41-117	
2,6-Dinitrotoluene	200	129	65	42-118	
Di-n-octyl phthalate	200	132	66	27-118	
Fluoranthene	200	130	65	35-111	
Fluorene	200	128	64	39-107	
Hexachlorobenzene	200	132	66	35-106	
Hexachlorobutadiene	200	124	62	30-103	
Hexachlorocyclopentadiene	200	130	65	19-116	
Hexachloroethane	200	118	59	27-94	
Indeno[1,2,3-cd]pyrene	200	127	64	32-116	
Isophorone	200	122	61	39-108	
2-Methylnaphthalene	200	119	59	36-101	
Naphthalene	200	118	59	35-98	
2-Nitroaniline	200	126	63	37-114	
3-Nitroaniline	200	124	62	32-117	
4-Nitroaniline	200	124	62	32-117	
4-Nitrophenol	400	266	67	29-120	
Nitrobenzene	200	112	56	37-103	
N-Nitrosodi-n-propylamine	200	117	59	37-106	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N1018003.D

Lab ID: LCS 180-86943/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
N-Nitrosodiphenylamine	200	127	64	34-108	
Phenanthrene	200	128	64	34-107	
Pyrene	200	131	65	36-115	
4-Chloro-3-methylphenol	200	125	62	40-107	
2-Chlorophenol	200	122	61	34-100	
2-Methylphenol	200	123	61	34-101	
Methylphenol, 3 & 4	200	121	60	34-104	
2,4-Dichlorophenol	200	126	63	34-106	
2,4-Dimethylphenol	200	130	65	34-98	
2,4-Dinitrophenol	400	240	60	3-125	
4,6-Dinitro-2-methylphenol	400	244	61	24-121	
2-Nitrophenol	200	127	64	33-108	
Pentachlorophenol	400	222	55	10-118	
Phenol	200	119	59	35-98	
2,4,5-Trichlorophenol	200	129	64	31-111	
2,4,6-Trichlorophenol	200	135	68	34-110	
Acetophenone	200	113	57	30-150	
Atrazine	200	128	64	30-150	
Benzaldehyde	200	110	55	30-150	
1,1'-Biphenyl	200	123	61	10-140	
Caprolactam	200	133	67	10-140	
Bis(2-chloroethoxy)methane	200	112	56	36-101	
Bis(2-chloroethyl)ether	200	116	58	34-96	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III

GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N1018004.D

Lab ID: LCSD 180-86943/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acenaphthene	200	133	66	4	32	39-106	
Acenaphthylene	200	133	66	6	33	40-113	
Anthracene	200	133	67	8	40	37-108	
Benzo[a]anthracene	200	135	68	6	33	40-103	
Benzo[a]pyrene	200	127	63	3	35	37-105	
Benzo[b]fluoranthene	200	122	61	0	44	35-100	
Benzo[g,h,i]perylene	200	137	68	2	45	31-118	
Benzo[k]fluoranthene	200	122	61	4	42	37-108	
Bis(2-ethylhexyl) phthalate	200	150	75	6	34	35-112	
2,2'-oxybis[1-chloropropane]	200	99.4	50	4	38	30-100	
4-Bromophenyl phenyl ether	200	143	71	9	40	38-108	
Butyl benzyl phthalate	200	150	75	6	35	34-110	
Carbazole	200	130	65	6	32	35-113	
4-Chloroaniline	200	116	58	5	55	26-99	
2-Chloronaphthalene	200	119	60	8	34	37-102	
4-Chlorophenyl phenyl ether	200	138	69	6	34	39-107	
Chrysene	200	140	70	4	38	39-103	
Dibenz(a,h)anthracene	200	139	69	3	43	32-117	
Dibenzofuran	200	133	67	5	32	37-107	
Di-n-butyl phthalate	200	138	69	7	39	36-113	
3,3'-Dichlorobenzidine	200	131	65	4	56	11-106	
Diethyl phthalate	200	138	69	5	32	39-112	
Dimethyl phthalate	200	137	69	7	33	40-110	
2,4-Dinitrotoluene	200	138	69	5	32	41-117	
2,6-Dinitrotoluene	200	139	70	7	33	42-118	
Di-n-octyl phthalate	200	136	68	3	36	27-118	
Fluoranthene	200	139	69	6	43	35-111	
Fluorene	200	135	67	5	33	39-107	
Hexachlorobenzene	200	142	71	8	36	35-106	
Hexachlorobutadiene	200	131	65	5	41	30-103	
Hexachlorocyclopentadiene	200	137	69	6	57	19-116	
Hexachloroethane	200	124	62	5	43	27-94	
Indeno[1,2,3-cd]pyrene	200	132	66	3	45	32-116	
Isophorone	200	131	65	7	36	39-108	
2-Methylnaphthalene	200	125	62	5	35	36-101	
Naphthalene	200	123	62	5	39	35-98	
2-Nitroaniline	200	131	66	4	33	37-114	
3-Nitroaniline	200	129	65	4	46	32-117	
4-Nitroaniline	200	125	62	0	39	32-117	
4-Nitrophenol	400	280	70	5	39	29-120	
Nitrobenzene	200	116	58	4	34	37-103	
N-Nitrosodi-n-propylamine	200	126	63	7	36	37-106	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N1018004.D

Lab ID: LCSD 180-86943/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
N-Nitrosodiphenylamine	200	136	68	6	42	34-108	
Phenanthrene	200	136	68	6	34	34-107	
Pyrene	200	135	67	3	38	36-115	
4-Chloro-3-methylphenol	200	133	67	6	32	40-107	
2-Chlorophenol	200	128	64	5	31	34-100	
2-Methylphenol	200	131	65	6	34	34-101	
Methylphenol, 3 & 4	200	128	64	6	34	34-104	
2,4-Dichlorophenol	200	133	66	5	33	34-106	
2,4-Dimethylphenol	200	137	69	5	34	34-98	
2,4-Dinitrophenol	400	254	63	6	62	3-125	
4,6-Dinitro-2-methylphenol	400	266	66	9	50	24-121	
2-Nitrophenol	200	131	66	3	41	33-108	
Pentachlorophenol	400	232	58	4	49	10-118	
Phenol	200	124	62	4	35	35-98	
2,4,5-Trichlorophenol	200	132	66	2	32	31-111	
2,4,6-Trichlorophenol	200	141	71	4	35	34-110	
Acetophenone	200	118	59	4	30	30-150	
Atrazine	200	134	67	4	30	30-150	
Benzaldehyde	200	114	57	3	30	30-150	
1,1'-Biphenyl	200	130	65	6	30	10-140	
Caprolactam	200	141	70	6	30	10-140	
Bis(2-chloroethoxy)methane	200	118	59	6	35	36-101	
Bis(2-chloroethyl)ether	200	123	62	7	34	34-96	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N1017008.D

Lab ID: 180-26012-1 MS Client ID: MB-MW-02-20131009 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Acenaphthene	194	ND	114	59	39-106	
Acenaphthylene	194	ND	111	57	40-113	
Anthracene	194	ND	113	58	37-108	
Benzo[a]anthracene	194	ND	115	59	40-103	
Benzo[a]pyrene	194	ND	83.0	43	37-105	
Benzo[b]fluoranthene	194	ND	80.0	41	35-100	
Benzo[g,h,i]perylene	194	ND	106	55	31-118	
Benzo[k]fluoranthene	194	ND	76.9	40	37-108	
Bis(2-ethylhexyl) phthalate	194	ND	124	64	35-112	
2,2'-oxybis[1-chloropropane]	194	ND	80.8	42	30-100	
4-Bromophenyl phenyl ether	194	ND	112	58	38-108	
Butyl benzyl phthalate	194	ND	112	58	34-110	
Carbazole	194	ND	134	69	35-113	
4-Chloroaniline	194	ND	82.7	43	26-99	
2-Chloronaphthalene	194	ND	99.6	51	37-102	
4-Chlorophenyl phenyl ether	194	ND	119	61	39-107	
Chrysene	194	ND	130	67	39-103	
Dibenz(a,h)anthracene	194	ND	108	56	32-117	
Dibenzofuran	194	ND	114	58	37-107	
Di-n-butyl phthalate	194	ND	119	61	36-113	
3,3'-Dichlorobenzidine	194	ND	8.82 J	5	11-106	F
Diethyl phthalate	194	97	131	18	39-112	F
Dimethyl phthalate	194	ND	125	64	40-110	
2,4-Dinitrotoluene	194	ND	137	70	41-117	
2,6-Dinitrotoluene	194	ND	130	67	42-118	
Di-n-octyl phthalate	194	ND	81.9	42	27-118	
Fluoranthene	194	ND	125	64	35-111	
Fluorene	194	ND	116	60	39-107	
Hexachlorobenzene	194	ND	117	61	35-106	
Hexachlorobutadiene	194	ND	101	52	30-103	
Hexachlorocyclopentadiene	194	ND	71.8	37	19-116	
Hexachloroethane	194	ND	90.6	47	27-94	
Indeno[1,2,3-cd]pyrene	194	ND	102	52	32-116	
Isophorone	194	ND	114	59	39-108	
2-Methylnaphthalene	194	ND	106	55	36-101	
Naphthalene	194	1.2 J	104	53	35-98	
2-Nitroaniline	194	ND	125	65	37-114	
3-Nitroaniline	194	ND	111	57	32-117	
4-Nitroaniline	194	ND	126	65	32-117	
4-Nitrophenol	388	ND	296	76	29-120	
Nitrobenzene	194	ND	105	54	37-103	
N-Nitrosodi-n-propylamine	194	ND	105	54	37-106	

Flag R
Flag L

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N1017008.D

Lab ID: 180-26012-1 MS Client ID: MB-MW-02-20131009 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
N-Nitrosodiphenylamine	194	ND	121	62	34-108	
Phenanthrene	194	ND	112	58	34-107	
Pyrene	194	ND	97.0	50	36-115	
4-Chloro-3-methylphenol	194	ND	120	62	40-107	
2-Chlorophenol	194	ND	104	53	34-100	
2-Methylphenol	194	ND	103	53	34-101	
Methylphenol, 3 & 4	194	ND	107	55	34-104	
2,4-Dichlorophenol	194	ND	112	58	34-106	
2,4-Dimethylphenol	194	150	254	53	34-98	
2,4-Dinitrophenol	388	ND	274	70	3-125	
4,6-Dinitro-2-methylphenol	388	ND	282	73	24-121	
2-Nitrophenol	194	ND	113	58	33-108	
Pentachlorophenol	388	ND	303	78	10-118	
Phenol	194	ND	90.1	46	35-98	
2,4,5-Trichlorophenol	194	ND	122	63	31-111	
2,4,6-Trichlorophenol	194	ND	121	62	34-110	
Acetophenone	194	ND	99.6	51	30-150	
Atrazine	194	ND	77.3	40	30-150	
Benzaldehyde	194	ND	99.9	51	30-150	
1,1'-Biphenyl	194	ND	108	55	10-140	
Caprolactam	194	42 J	142	52	10-140	
Bis(2-chloroethoxy)methane	194	ND	102	52	36-101	
Bis(2-chloroethyl)ether	194	ND	101	52	34-96	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N1017009.D

Lab ID: 180-26012-1 MSD Client ID: MB-MW-02-20131009 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acenaphthene	190	114	60	0	32	39-106	
Acenaphthylene	190	109	57	1	33	40-113	
Anthracene	190	109	57	3	40	37-108	
Benzo[a]anthracene	190	114	60	1	33	40-103	
Benzo[a]pyrene	190	81.4	43	2	35	37-105	
Benzo[b]fluoranthene	190	77.3	41	4	44	35-100	
Benzo[g,h,i]perylene	190	105	55	1	45	31-118	
Benzo[k]fluoranthene	190	75.9	40	1	42	37-108	
Bis(2-ethylhexyl) phthalate	190	122	64	2	34	35-112	
2,2'-oxybis[1-chloropropane]	190	81.3	43	1	38	30-100	
4-Bromophenyl phenyl ether	190	112	59	1	40	38-108	
Butyl benzyl phthalate	190	112	59	0	35	34-110	
Carbazole	190	131	69	3	32	35-113	
4-Chloroaniline	190	78.7	41	5	55	26-99	
2-Chloronaphthalene	190	99.1	52	0	34	37-102	
4-Chlorophenyl phenyl ether	190	113	60	5	34	39-107	
Chrysene	190	127	67	3	38	39-103	
Dibenz(a,h)anthracene	190	106	56	2	43	32-117	
Dibenzofuran	190	114	60	1	32	37-107	
Di-n-butyl phthalate	190	124	65	4	39	36-113	
3,3'-Dichlorobenzidine	190	8.17 J	4	8	56	11-106	F
Diethyl phthalate	190	126	16	3	32	39-112	F
Dimethyl phthalate	190	122	64	2	33	40-110	
2,4-Dinitrotoluene	190	134	70	2	32	41-117	
2,6-Dinitrotoluene	190	129	68	1	33	42-118	
Di-n-octyl phthalate	190	80.5	42	2	36	27-118	
Fluoranthene	190	123	65	1	43	35-111	
Fluorene	190	117	61	0	33	39-107	
Hexachlorobenzene	190	117	62	0	36	35-106	
Hexachlorobutadiene	190	98.1	51	3	41	30-103	
Hexachlorocyclopentadiene	190	73.6	39	2	57	19-116	
Hexachloroethane	190	89.0	47	2	43	27-94	
Indeno[1,2,3-cd]pyrene	190	99.7	52	2	45	32-116	
Isophorone	190	111	58	3	36	39-108	
2-Methylnaphthalene	190	105	55	1	35	36-101	
Naphthalene	190	105	54	1	39	35-98	
2-Nitroaniline	190	124	65	1	33	37-114	
3-Nitroaniline	190	76.1	40	37	46	32-117	
4-Nitroaniline	190	115	60	9	39	32-117	
4-Nitrophenol	381	268	70	10	39	29-120	
Nitrobenzene	190	107	56	2	34	37-103	
N-Nitrosodi-n-propylamine	190	101	53	4	36	37-106	

Flags

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N1017009.D

Lab ID: 180-26012-1 MSD Client ID: MB-MW-02-20131009 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
N-Nitrosodiphenylamine	190	120	63	1	42	34-108	
Phenanthrene	190	110	58	2	34	34-107	
Pyrene	190	101	53	4	38	36-115	
4-Chloro-3-methylphenol	190	120	63	0	32	40-107	
2-Chlorophenol	190	99.3	52	4	31	34-100	
2-Methylphenol	190	103	54	0	34	34-101	
Methylphenol, 3 & 4	190	99.6	52	8	34	34-104	
2,4-Dichlorophenol	190	111	58	1	33	34-106	
2,4-Dimethylphenol	190	257	55	1	34	34-98	
2,4-Dinitrophenol	381	260	68	5	62	3-125	
4,6-Dinitro-2-methylphenol	381	277	73	2	50	24-121	
2-Nitrophenol	190	114	60	1	41	33-108	
Pentachlorophenol	381	286	75	6	49	10-118	
Phenol	190	86.3	45	4	35	35-98	
2,4,5-Trichlorophenol	190	121	64	1	32	31-111	
2,4,6-Trichlorophenol	190	119	63	1	35	34-110	
Acetophenone	190	94.3	49	6	30	30-150	
Atrazine	190	77.3	41	0	30	30-150	
Benzaldehyde	190	98.7	52	1	30	30-150	
1,1'-Biphenyl	190	108	57	0	30	10-140	
Caprolactam	190	138	50	3	30	10-140	
Bis(2-chloroethoxy)methane	190	103	54	1	35	36-101	
Bis(2-chloroethyl)ether	190	97.5	51	3	34	34-96	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab File ID: N1017005.D Lab Sample ID: MB 180-86837/1-A

Matrix: Water Date Extracted: 10/16/2013 09:07

Instrument ID: 733 Date Analyzed: 10/17/2013 12:03

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-86837/2-A	N1017006.D	10/17/2013 13:20
MB-MW-02-20131009	180-26012-1	N1017007.D	10/17/2013 14:12
MB-MW-02-20131009 MS	180-26012-1 MS	N1017008.D	10/17/2013 15:04
MB-MW-02-20131009 MSD	180-26012-1 MSD	N1017009.D	10/17/2013 15:31
MB-MW-01-20131009	180-26012-2	N1017010.D	10/17/2013 15:57
MB-MW-03-20131009	180-26012-3	N1017011.D	10/17/2013 16:23
MB-EB-20131009	180-26012-4	N1017012.D	10/17/2013 16:49
MB-MW-04-20131009	180-26012-5	N1017013.D	10/17/2013 17:15
DUP-20131009	180-26012-7	N1017014.D	10/17/2013 17:41

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab File ID: N1018002.D Lab Sample ID: MB 180-86943/1-A

Matrix: Water Date Extracted: 10/17/2013 06:31

Instrument ID: 733 Date Analyzed: 10/18/2013 11:57

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-86943/2-A	N1018003.D	10/18/2013 12:48
	LCSD 180-86943/3-A	N1018004.D	10/18/2013 13:14
MB-MW-06-20131010	180-26012-6	N1018005.D	10/18/2013 14:32
MB-MW-05-20131010	180-26012-8	N1018006.D	10/18/2013 14:58
MB-EB-20131010	180-26012-9	N1018007.D	10/18/2013 15:24

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab File ID: N1009DF1.D DFTPP Injection Date: 10/09/2013

Instrument ID: 733 DFTPP Injection Time: 05:09

Analysis Batch No.: 86218

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	36.1	
68	Less than 2.0 % of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	41.4	
70	Less than 2.0 % of mass 69	0.5	(1.1)1
127	40.0 - 60.0 % of mass 198	44.9	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	7.6	
275	10.0 - 30.0 % of mass 198	24.8	
365	Greater than 1.0 % of mass 198	2.8	
441	Present but less than mass 443	7.8	(68.6)3
442	Greater than 40.0 % of mass 198	57.0	
443	17.0 - 23.0 % of mass 442	11.3	(19.9)2

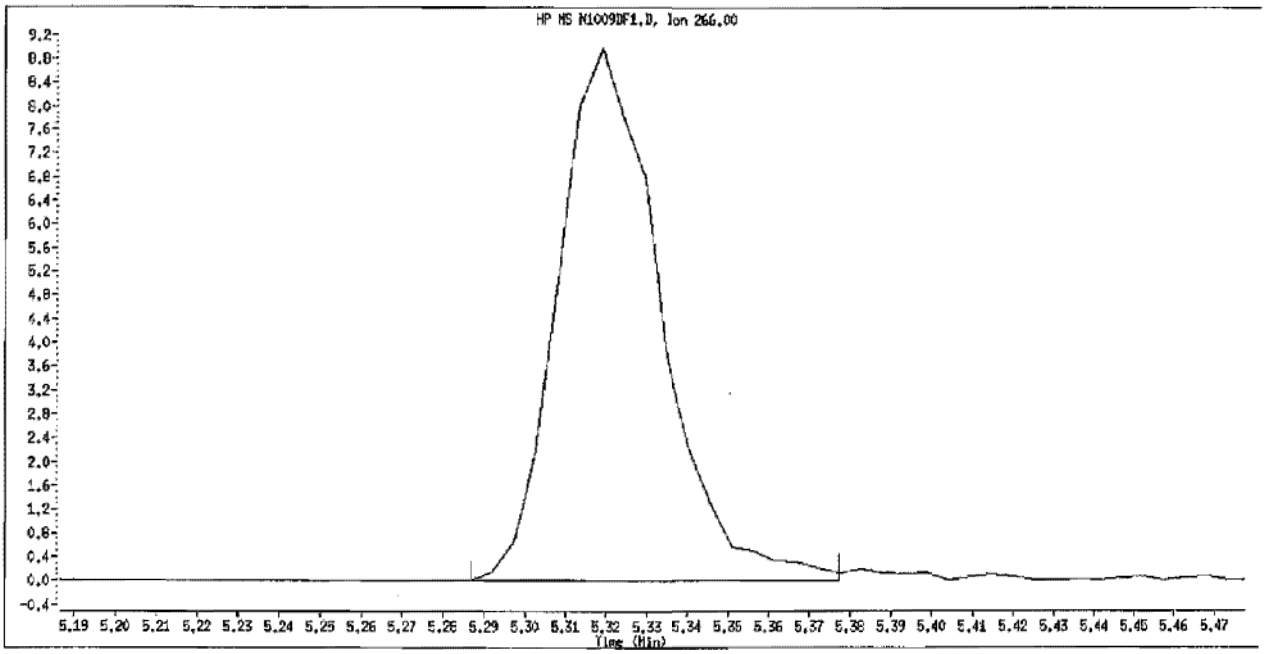
1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

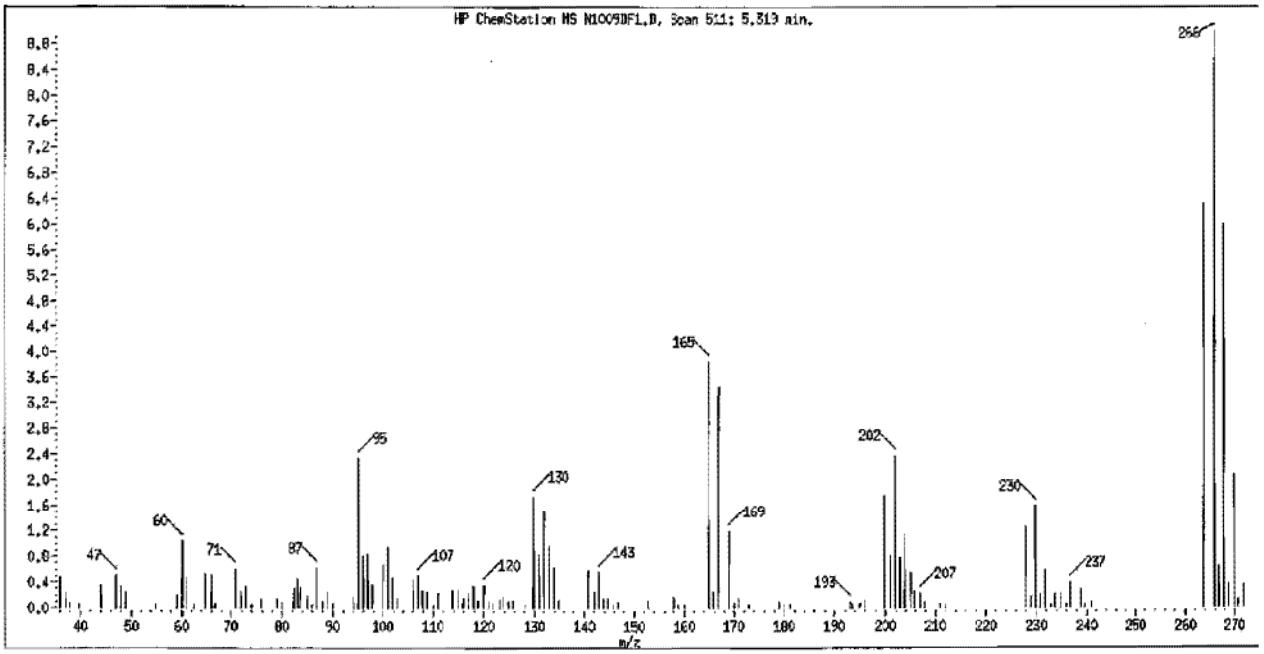
THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 180-86218/2	N1009IC1.D	10/09/2013	05:24
	IC 180-86218/3	N1009IC2.D	10/09/2013	05:49
	IC 180-86218/4	N1009IC3.D	10/09/2013	06:15
	ICIS 180-86218/5	N1009IC4.D	10/09/2013	06:40
	IC 180-86218/6	N1009IC5.D	10/09/2013	07:06
	IC 180-86218/7	N1009IC6.D	10/09/2013	07:31
	IC 180-86218/8	N1009IC7.D	10/09/2013	07:56
	IC 180-86218/9	N1009IC8.D	10/09/2013	08:22
	ICV 180-86218/10	N1009SV1.D	10/09/2013	08:47
	ICV 180-86218/11	N1009SV2.D	10/09/2013	09:13

Data File: N1009DF1.D
Inj Date: 09-OCT-2013 05:09
Instrument ID: 733.i
Compound Name: Pentachlorophenol
Operator Name: 3200
Report Date: 10/09/2013

TAILING FACTOR

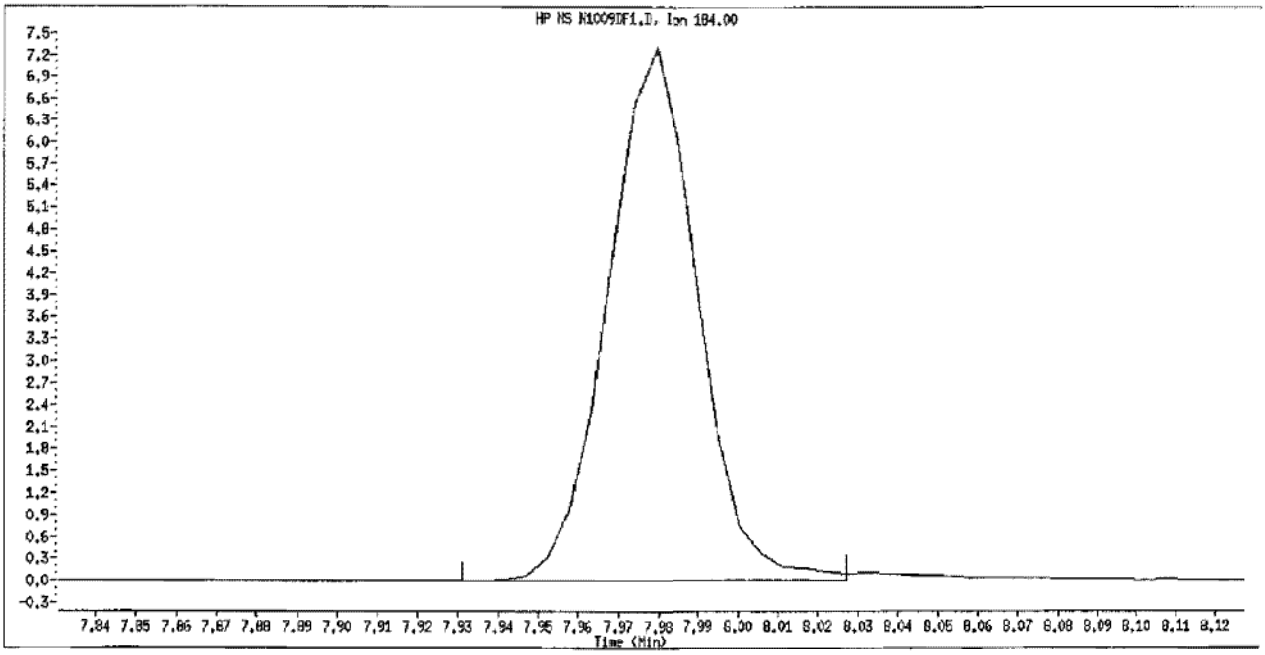


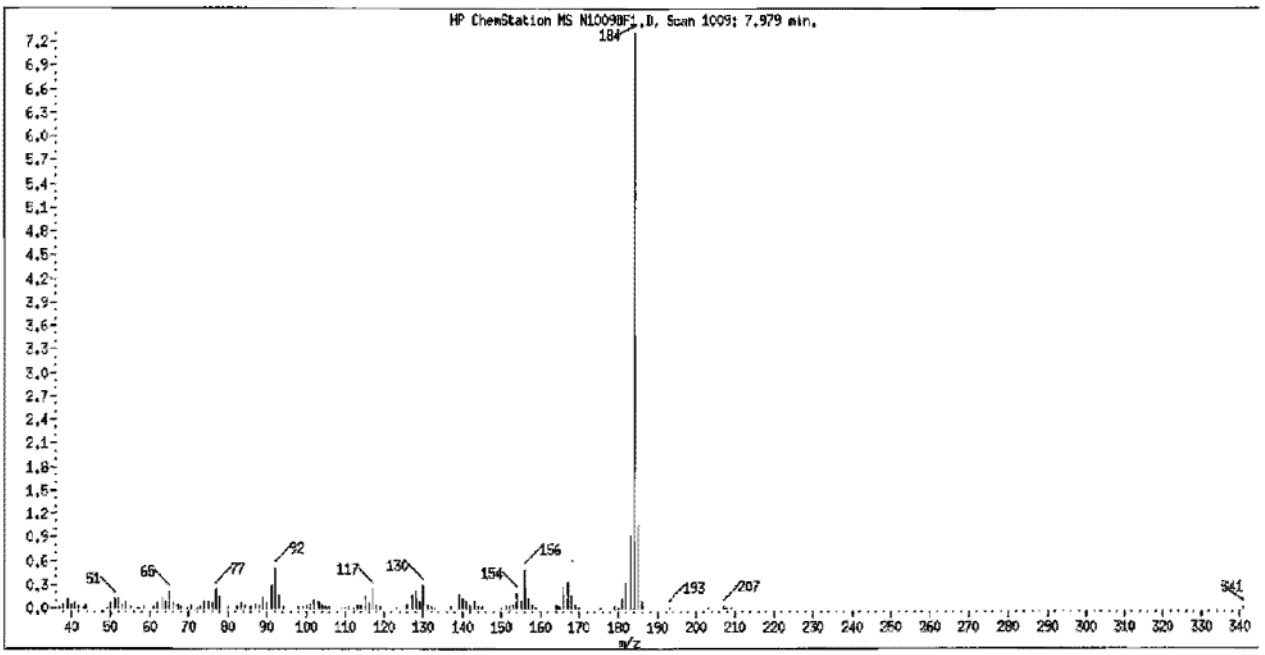


Tailing Factor = 1.45 Good
Acceptance Criteria 0 - 2
Tailing Factor = (T3 - T2) / (T2 - T1)
T1 = 5.29812 T2 = 5.3187 T3 = 5.348543

Data File: N1009DF1.D
Inj Date: 09-OCT-2013 05:09
Instrument ID: 733.i
Compound Name: Benzidine
Operator Name: 3200
Report Date: 10/09/2013

TAILING FACTOR

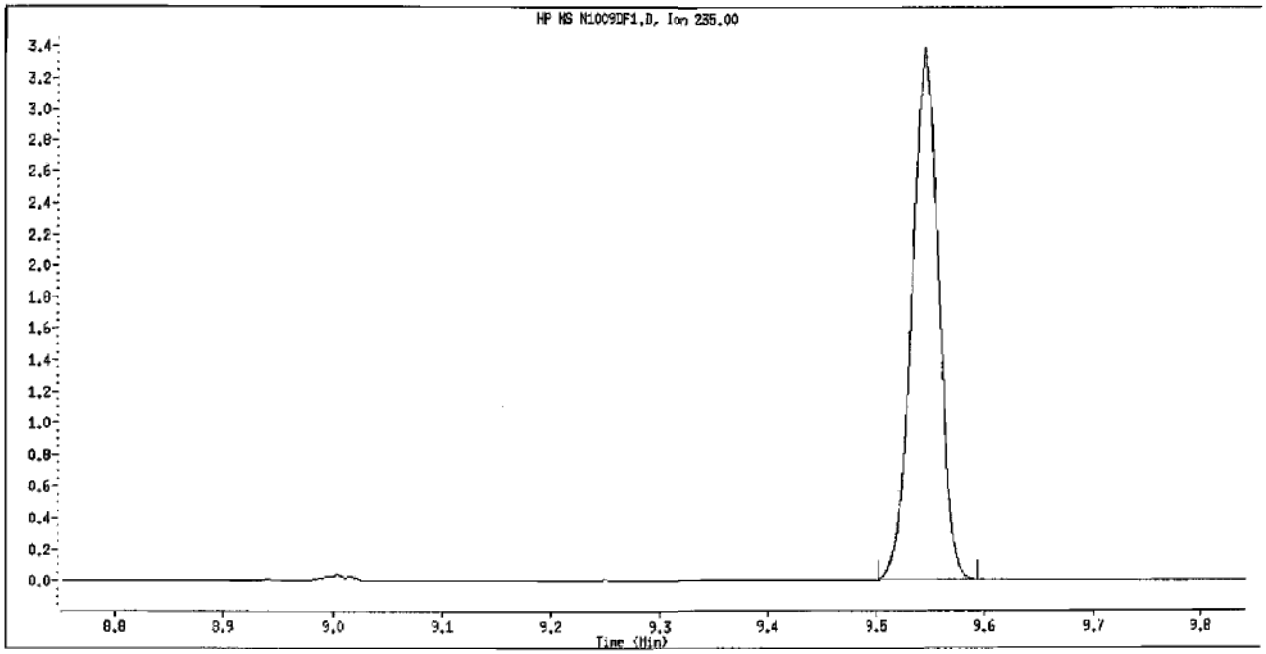




Tailing Factor = 0.922 Good
Acceptance Criteria 0 - 2
Tailing Factor = (T3 - T2) / (T2 - T1)
T1 = 7.955701 T2 = 7.9791 T3 = 8.000664

Data File: N1009DF1.D
Inj Date: 09-OCT-2013 05:09
Instrument ID: 733.i
Compound Name: 4,4'-DDT
Operator Name: 3200
Report Date: 10/09/2013

DEGRADATION REPORT



Degradation = 0.0773% Good
Acceptance Criteria 0 - 20 %
DDT Area = 584418
DDE Area = 452
DDD Area = 0

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86218

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2013 05:24 Calibration End Date: 10/09/2013 08:22 Calibration ID: 11737

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86218/2	N1009IC1.D
Level 2	IC 180-86218/3	N1009IC2.D
Level 3	IC 180-86218/4	N1009IC3.D
Level 4	ICIS 180-86218/5	N1009IC4.D
Level 5	IC 180-86218/6	N1009IC5.D
Level 6	IC 180-86218/9	N1009IC8.D
Level 7	IC 180-86218/7	N1009IC6.D
Level 8	IC 180-86218/8	N1009IC7.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	0.5560 0.5023	0.5312 0.5102	0.5344 0.5136	0.4992	0.5175	Ave		0.5205			0.0100	3.6		20.0			
N-Nitrosodimethylamine	0.5685 0.6726	0.6211 0.6662	0.6341 0.6777	0.6631	0.6773	Ave		0.6476			0.0100	5.9		20.0			
Pyridine	+++++ 1.2213	1.1681 1.0104	1.2339 1.1342	1.2332	1.2601	Ave		1.1802			0.0100	7.3		20.0			
Methyl methanesulfonate	0.8261 0.7181	0.7279 0.6989	0.8010 0.6805	0.7725	0.7498	Ave		0.7469			0.0100	6.7		20.0			
Benzaldehyde	1.1302 0.9495	0.9287 0.9044	1.0222 0.8330	1.0069	1.0101	Ave		0.9731			0.0100	9.2		20.0			
Phenol	1.9473 1.6504	1.5763 1.6476	1.5642 1.6570	1.6385	1.6210	Ave		1.6628			0.8000	7.2		20.0			
Aniline	1.8215 1.7899	1.6873 1.6641	1.7683 1.6826	1.8107	1.7893	Ave		1.7517			0.0100	3.6		20.0			
Bis(2-chloroethyl)ether	1.0739 1.0486	1.0346 1.0698	1.0849 1.0578	1.0294	1.0488	Ave		1.0560			0.7000	1.8		20.0			
2-Chlorophenol	1.3561 1.3043	1.3160 1.3130	1.2728 1.3373	1.2683	1.3128	Ave		1.3101			0.8000	2.2		20.0			
n-Decane	0.9872 0.9977	0.9641 0.9870	1.0345 1.0090	0.9701	0.9851	Ave		0.9918				2.2					
1,3-Dichlorobenzene	1.5013 1.6006	1.5221 1.5905	1.5803 1.6187	1.5889	1.5846	Ave		1.5734			0.0100	2.6		20.0			
1,4-Dichlorobenzene	1.7256 1.5864	1.5775 1.6215	1.6088 1.6236	1.5576	1.5838	Ave		1.6106			0.0100	3.2		20.0			
Benzyl alcohol	0.7325 0.7504	0.6730 0.7517	0.6920 0.7601	0.7201	0.7466	Ave		0.7283			0.0100	4.3		20.0			
1,2-Dichlorobenzene	1.6285 1.4913	1.4582 1.5040	1.4983 1.5159	1.4622	1.4882	Ave		1.5058			0.0100	3.5		20.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86218

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2013 05:24 Calibration End Date: 10/09/2013 08:22 Calibration ID: 11737

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Methylphenol	1.1941 1.1090	1.0480 1.1323	1.0413 1.1406	1.0539	1.0801	Ave		1.0999			0.7000	4.9		20.0			
Indene	2.2212 2.2790	2.0313 2.3330	2.1595 2.4154	2.1194	2.1826	Ave		2.2177			0.0100	5.5		20.0			
2,2'-oxybis[1-chloropropane]	1.2490 1.1406	1.1360 1.1500	1.1499 1.1341	1.1167	1.1507	Ave		1.1534			0.0100	3.5		20.0			
N-Nitrosopyrrolidine	0.5193 0.4893	0.4362 0.4613	0.4635 0.4869	0.4726	0.4938	Ave		0.4779			0.0100	5.3		20.0			
Acetophenone	2.4176 1.7087	1.7162 1.7232	1.7143 1.7465	1.6710	1.6732	Ave		1.7963			0.0100	14.0		20.0			
N-Nitrosodi-n-propylamine	0.8087 0.8008	0.7512 0.8016	0.8225 0.8348	0.7846	0.8109	Ave		0.8019			0.5000	3.2		20.0			
Methylphenol, 3 & 4	1.1805 1.1949	1.0273 1.2044	1.1088 1.2487	1.1195	1.1395	Ave		1.1530			0.6000	6.0		20.0			
Hexachloroethane	0.6629 0.5971	0.5703 0.6106	0.5948 0.6099	0.5921	0.5893	Ave		0.6034			0.3000	4.5		20.0			
Nitrobenzene	0.3724 0.3628	0.3584 0.3610	0.3514 0.3688	0.3436	0.3643	Ave		0.3603			0.2000	2.6		20.0			
Isophorone	0.5353 0.5977	0.5550 0.6095	0.5685 0.6202	0.5582	0.5821	Ave		0.5783			0.4000	5.1		20.0			
2-Nitrophenol	0.1895 0.2052	0.1701 0.2145	0.1794 0.2142	0.1934	0.2017	Ave		0.1960			0.1000	8.1		20.0			
2,4-Dimethylphenol	0.3348 0.3349	0.2828 0.3529	0.2740 0.3582	0.2863	0.3039	Ave		0.3160			0.2000	10.5		20.0			
Bis(2-chloroethoxy)methane	0.3416 0.3717	0.3541 0.3774	0.3482 0.3818	0.3367	0.3637	Ave		0.3594			0.3000	4.7		20.0			
Benzoic acid	+++++ 0.1801	+++++ 0.1807	0.0892 0.1909	0.1256	0.1673	Qua	0.5758	5.5258	-0.109		0.0100			20.0	0.9994		0.9900
2,4-Dichlorophenol	0.3209 0.3305	0.3044 0.3424	0.3168 0.3439	0.3170	0.3319	Ave		0.3260			0.2000	4.2		20.0			
1,2,4-Trichlorobenzene	0.3728 0.3978	0.3976 0.4105	0.4093 0.4124	0.3814	0.4031	Ave		0.3981			0.0100	3.6		20.0			
Naphthalene	1.1072 1.0649	1.0222 1.1119	1.0067 1.1296	0.9910	1.0566	Ave		1.0613			0.7000	4.9		20.0			
4-Chloroaniline	0.4095 0.4280	0.3999 0.4467	0.4250 0.4507	0.4130	0.4356	Ave		0.4260			0.0100	4.2		20.0			
2,6-Dichlorophenol	0.3072 0.3186	0.2948 0.3318	0.3028 0.3339	0.3038	0.3193	Ave		0.3140			0.0100	4.5		20.0			
Hexachlorobutadiene	0.2626 0.2685	0.2789 0.2782	0.2583 0.2763	0.2549	0.2680	Ave		0.2682			0.0100	3.4		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86218

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2013 05:24 Calibration End Date: 10/09/2013 08:22 Calibration ID: 11737

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Caprolactam	+++++ 0.0814	0.0738 0.0832	0.0630 0.0837	0.0739	0.0752	Ave		0.0763			0.0100	9.5		20.0			
4-Chloro-3-methylphenol	0.2953 0.2880	0.2614 0.2980	0.2817 0.3037	0.2814	0.2935	Ave		0.2879			0.2000	4.6		20.0			
2-Methylnaphthalene	0.7388 0.7564	0.6982 0.7748	0.7084 0.7857	0.7171	0.7372	Ave		0.7396			0.4000	4.2		20.0			
1-Methylnaphthalene	0.6723 0.6850	0.6697 0.7060	0.6492 0.7160	0.6416	0.6726	Ave		0.6766			0.0100	3.8		20.0			
Hexachlorocyclopentadiene	0.4441 0.5769	0.4252 0.5914	0.4772 0.5975	0.4997	0.5434	Ave		0.5194			0.0500	13.0		20.0			
1,2,4,5-Tetrachlorobenzene	0.8106 0.7570	0.7310 0.7651	0.7391 0.7830	0.7139	0.7666	Ave		0.7583			0.0100	4.0		20.0			
2,4,6-Trichlorophenol	0.4349 0.4467	0.3765 0.4374	0.3942 0.4398	0.4077	0.4234	Ave		0.4201			0.2000	5.9		20.0			
2,4,5-Trichlorophenol	0.4089 0.4525	0.4291 0.4672	0.4318 0.4625	0.4306	0.4501	Ave		0.4416			0.2000	4.5		20.0			
1,1'-Biphenyl	1.6739 1.5394	1.4826 1.5660	1.5078 1.5946	1.4585	1.5340	Ave		1.5446			0.0100	4.4		20.0			
2-Chloronaphthalene	1.4771 1.2840	1.2955 1.3755	1.2623 1.3633	1.2804	1.2192	Ave		1.3197			0.8000	6.2		20.0			
2-Nitroaniline	0.2374 0.3053	0.2765 0.3041	0.2983 0.2992	0.2892	0.3035	Ave		0.2892			0.0100	8.0		20.0			
Dimethyl phthalate	1.3118 1.2701	1.2609 1.3080	1.2788 1.2821	1.2815	1.2913	Ave		1.2856			0.0100	1.4		20.0			
1,3-Dinitrobenzene	0.1515 0.2116	0.1793 0.2134	0.1893 0.2091	0.2088	0.2131	Ave		0.1970			0.0100	11.3		20.0			
2,6-Dinitrotoluene	0.2389 0.2960	0.2678 0.2987	0.2832 0.2972	0.2996	0.3008	Ave		0.2853			0.2000	7.7		20.0			
Acenaphthylene	1.7531 1.9284	1.7288 1.9472	1.8185 1.9402	1.8090	1.8869	Ave		1.8515			0.9000	4.6		20.0			
3-Nitroaniline	0.2669 0.2854	0.2687 0.2948	0.2838 0.2906	0.2972	0.2899	Ave		0.2847			0.0100	4.0		20.0			
Acenaphthene	1.2498 1.2306	1.1601 1.2620	1.1589 1.2610	1.1703	1.2045	Ave		1.2121			0.9000	3.7		20.0			
2,4-Dinitrophenol	+++++ 0.1995	+++++ 0.2187	0.1014 0.2127	0.1574	0.1866	Qua	0.6723	4.5706	-0.018		0.0100			20.0	0.9987		0.9900
4-Nitrophenol	0.1087 0.1662	0.1415 0.1794	0.1555 0.1717	0.1625	0.1672	Ave		0.1566			0.0100	14.3		20.0			
2,4-Dinitrotoluene	0.2663 0.3926	0.3333 0.4093	0.3783 0.3962	0.3804	0.3864	Ave		0.3678			0.2000	12.7		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86218

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2013 05:24 Calibration End Date: 10/09/2013 08:22 Calibration ID: 11737

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dibenzofuran	1.7030 1.6571	1.6517 1.6748	1.6787 1.6551	1.6112	1.6227	Ave		1.6568			0.8000	1.8		20.0			
2,3,5,6-Tetrachlorophenol	+++++ 0.3947	0.2890 0.4097	0.3310 0.4063	0.3570	0.3889	Ave		0.3681			0.0100	12.2		20.0			
2,3,4,6-Tetrachlorophenol	0.3554 0.3870	0.3522 0.4014	0.3779 0.3951	0.3865	0.3993	Ave		0.3819			0.0100	5.0		20.0			
2-Naphthylamine	0.9083 +++++	0.9709 +++++	0.9933 +++++	0.8514	0.6946	Ave		0.8837			0.0100	13.5		20.0			
Diethyl phthalate	1.2145 1.2106	1.1446 1.2465	1.2189 1.2299	1.1943	1.2130	Ave		1.2090			0.0100	2.5		20.0			
Hexadecane	0.3015 0.3435	0.3023 0.3709	0.3117 0.3765	0.3135	0.3336	Ave		0.3317				9.0					
4-Chlorophenyl phenyl ether	0.7439 0.7595	0.7299 0.7544	0.7449 0.7622	0.7180	0.7333	Ave		0.7433			0.4000	2.1		20.0			
4-Nitroaniline	0.2542 0.2867	0.2481 0.2950	0.2692 0.2899	0.2811	0.2699	Ave		0.2743			0.0100	6.2		20.0			
Fluorene	1.3659 1.3244	1.2840 1.3769	1.3159 1.3727	1.2918	1.3252	Ave		1.3321			0.9000	2.7		20.0			
4,6-Dinitro-2-methylphenol	+++++ 0.1555	+++++ 0.1583	0.1146 0.1678	0.1431	0.1459	Qua	0.1540	6.8213	-0.266		0.0100			20.0	0.9998		0.9900
N-Nitrosodiphenylamine	0.5024 0.5613	0.5255 0.5774	0.5085 0.6007	0.5220	0.5492	Ave		0.5434			0.0100	6.4		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	0.6204 0.7426	0.6676 0.7334	0.6898 0.7476	0.6682	0.7114	Ave		0.6976			0.0100	6.4		20.0			
4-Bromophenyl phenyl ether	0.2615 0.2704	0.2641 0.2740	0.2506 0.2803	0.2433	0.2656	Ave		0.2637			0.1000	4.6		20.0			
Hexachlorobenzene	0.2521 0.2542	0.2395 0.2601	0.2332 0.2667	0.2272	0.2448	Ave		0.2472			0.1000	5.5		20.0			
Atrazine	0.2077 0.2179	0.2130 0.1919	0.2292 0.1613	0.2206	0.2250	Ave		0.2083			0.0100	10.7		20.0			
Pentachlorophenol	0.1043 0.1778	0.1056 0.1870	0.0995 0.1998	0.1427	0.1619	Qua	0.2483	6.0144	-0.269		0.0500			20.0	0.9997		0.9900
n-Octadecane	1.2042 1.1479	0.9921 1.1646	1.0911 1.1914	1.1791	1.1299	Ave		1.1375				6.1					
Phenanthrene	1.1217 1.1486	1.0663 1.1839	1.0783 1.2152	1.0507	1.0992	Ave		1.1205			0.7000	5.2		20.0			
Anthracene	1.1004 1.1316	1.0827 1.1428	1.0508 1.1836	1.0700	1.1213	Ave		1.1104			0.7000	3.9		20.0			
Carbazole	1.0016 0.9650	0.9138 0.9887	0.9204 1.0065	0.9402	0.9523	Ave		0.9611			0.0100	3.7		20.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86218

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2013 05:24 Calibration End Date: 10/09/2013 08:22 Calibration ID: 11737

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Di-n-butyl phthalate	0.9839 1.1563	0.9794 1.1502	1.0608 1.1937	1.0925	1.1461	Ave		1.0954			0.0100	7.4		20.0			
Fluoranthene	1.2183 1.2520	1.1919 1.3026	1.2189 1.2873	1.2526	1.2313	Ave		1.2444			0.6000	3.0		20.0			
Benzidine	0.1608 0.2136	0.3792 0.1997	0.4099 +++++	0.3350	0.2941	Qua	-0.039	2.5025	1.7452		0.0100			20.0	0.9952		0.9900
Pyrene	1.3158 1.2692	1.2284 1.2267	1.2703 1.2631	1.2514	1.3318	Ave		1.2696			0.6000	3.0		20.0			
Butyl benzyl phthalate	0.4101 0.4630	0.3658 0.4516	0.3901 0.4765	0.4441	0.4681	Ave		0.4337			0.0100	9.3		20.0			
3,3'-Dichlorobenzidine	0.3340 0.4121	0.3228 0.4235	0.3395 0.4442	0.3793	0.4064	Ave		0.3827			0.0100	12.0		20.0			
Bis(2-ethylhexyl) phthalate	+++++ 0.6195	0.4421 0.6217	0.5076 0.6474	0.5794	0.6151	Ave		0.5761			0.0100	12.9		20.0			
Benzo[a]anthracene	1.2970 1.1352	1.0898 1.1378	1.1096 1.1762	1.1102	1.1572	Ave		1.1516			0.8000	5.6		20.0			
Chrysene	1.0213 1.0272	1.0515 1.0157	1.0307 1.0580	0.9968	1.0463	Ave		1.0309			0.7000	2.0		20.0			
Di-n-octyl phthalate	0.8515 1.2803	0.8642 1.2979	0.9867 1.3653	1.1103	1.2448	Qua	0.0627	0.8223	-0.007		0.0100			20.0	0.9998		0.9900
7,12-Dimethylbenz(a)anthracene	0.4752 0.6408	0.5087 0.6685	0.5360 0.6995	0.5600	0.6313	Ave		0.5900			0.0100	13.7		20.0			
Benzo[b]fluoranthene	1.3148 1.4270	1.2972 1.4055	1.3053 1.4944	1.3968	1.4979	Ave		1.3924			0.7000	5.8		20.0			
Benzo[k]fluoranthene	1.4974 1.3518	1.3500 1.4101	1.4219 1.4076	1.3250	1.3442	Ave		1.3885			0.7000	4.1		20.0			
Benzo[a]pyrene	1.1308 1.2459	1.1928 1.2756	1.1622 1.3337	1.2152	1.2556	Ave		1.2265			0.7000	5.3		20.0			
Indeno[1,2,3-cd]pyrene	1.1984 1.3068	1.1621 1.3639	1.1629 1.4227	1.2084	1.2770	Ave		1.2628			0.5000	7.6		20.0			
Dibenz(a,h)anthracene	1.0016 1.0819	0.9688 1.1455	0.9704 1.2165	1.0522	1.0757	Ave		1.0641			0.4000	8.1		20.0			
Benzo[g,h,i]perylene	0.9764 1.0726	0.9528 1.1361	0.9780 1.1856	1.0407	1.0501	Ave		1.0490			0.5000	7.8		20.0			
2-Fluorophenol (Surr)	1.0763 1.3056	1.1790 1.2920	1.2561 1.2919	1.2680	1.2901	Ave		1.2449				6.3		20.0			
Phenol-d5 (Surr)	1.4462 1.4919	1.3836 1.4756	1.4488 1.4930	1.4791	1.4828	Ave		1.4626				2.5		20.0			
Nitrobenzene-d5 (Surr)	0.3473 0.3607	0.3569 0.3686	0.3551 0.3695	0.3458	0.3621	Ave		0.3582				2.5		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86218

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2013 05:24 Calibration End Date: 10/09/2013 08:22 Calibration ID: 11737

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Fluorobiphenyl	1.4478 1.5090	1.4556 1.5034	1.4716 1.5319	1.4489	1.4995	Ave		1.4835				2.1		20.0			
2,4,6-Tribromophenol (Surr)	0.0666 0.0971	0.0795 0.0998	0.0828 0.0995	0.0868	0.0913	Ave		0.0879			0.0100	13.1		20.0			
Terphenyl-d14 (Surr)	1.0357 0.9543	0.8969 0.9156	0.9340 0.9366	0.9162	0.9837	Ave		0.9466				4.7		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86218

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2013 05:24 Calibration End Date: 10/09/2013 08:22 Calibration ID: 11737

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86218/2	N1009IC1.D
Level 2	IC 180-86218/3	N1009IC2.D
Level 3	IC 180-86218/4	N1009IC3.D
Level 4	ICIS 180-86218/5	N1009IC4.D
Level 5	IC 180-86218/6	N1009IC5.D
Level 6	IC 180-86218/9	N1009IC8.D
Level 7	IC 180-86218/7	N1009IC6.D
Level 8	IC 180-86218/8	N1009IC7.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dioxane	DCB	Ave	4407 396633	20460 559140	41020 697506	117386	209430	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosodimethylamine	DCB	Ave	4506 531128	23923 730208	48673 920421	155922	274132	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pyridine	DCB	Ave	+++++ 964445	44989 1107431	94711 1540429	289975	509966	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Methyl methanesulfonate	DCB	Ave	6548 567068	28035 766030	61480 924155	181659	303474	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzaldehyde	DCB	Ave	8958 749772	35767 991228	78464 1131307	236769	408815	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenol	DCB	Ave	15435 1303212	60710 1805750	120062 2250413	385287	656048	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Aniline	DCB	Ave	14438 1413424	64985 1823867	135729 2285273	425779	724158	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-chloroethyl)ether	DCB	Ave	8512 828057	39846 1172561	83276 1436633	242048	424448	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Chlorophenol	DCB	Ave	10749 1029931	50685 1439058	97695 1816202	298233	531323	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
n-Decane	DCB	Ave	7825 787805	37130 1081785	79403 1370302	228116	398690	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	11900 1263944	58623 1743239	121305 2198386	373611	641309	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	13678 1252675	60757 1777241	123486 2205090	366256	640977	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzyl alcohol	DCB	Ave	5806 592566	25922 823928	53119 1032294	169334	302149	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	12908 1177622	56160 1648410	115008 2058829	343817	602281	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Methylphenol	DCB	Ave	9465 875705	40363 1241064	79931 1549112	247813	437137	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86218

SDG No.:

Instrument ID: 733 GC Column: Rxi-5Si1MS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2013 05:24 Calibration End Date: 10/09/2013 08:22 Calibration ID: 11737

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Indene	DCB	Ave	17606 1799627	78236 2557067	165760 3280469	498366	883342	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,2'-oxybis[1-chloropropane]	DCB	Ave	9900 900642	43754 1260386	88265 1540322	262582	465695	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosopyrrolidine	DCB	Ave	4116 386387	16800 505606	35574 661329	111136	199844	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acetophenone	DCB	Ave	19163 1349257	66100 1888655	131584 2371942	392914	677174	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
N-Nitrosodi-n-propylamine	DCB	Ave	6410 632335	28933 878517	63133 1133835	184502	328170	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Methylphenol, 3 & 4	DCB	Ave	9357 943575	39567 1320086	85113 1695931	263234	461173	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachloroethane	DCB	Ave	5254 471538	21964 669258	45655 828381	139219	238511	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Nitrobenzene	NPT	Ave	10603 974602	47540 1311569	94553 1654300	286996	504446	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Isophorone	NPT	Ave	15242 1605683	73606 2214370	152976 2782507	466282	806005	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Nitrophenol	NPT	Ave	5397 551093	22566 779318	48260 960736	161525	279293	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dimethylphenol	NPT	Ave	9533 899652	37515 1282247	73718 1606978	239180	420719	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-chloroethoxy)methane	NPT	Ave	9726 998627	46964 1371272	93690 1712722	281231	503520	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzoic acid	NPT	Qua	+++++ 967765	+++++ 1312703	47985 1712441	209924	463377	+++++ 80.0	+++++ 120	8.00 160	20.0	40.0
2,4-Dichlorophenol	NPT	Ave	9137 887829	40376 1243867	85231 1542653	264849	459573	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2,4-Trichlorobenzene	NPT	Ave	10614 1068727	52730 1491351	110122 1850179	318633	558176	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Naphthalene	NPT	Ave	31526 2860503	135581 4039807	270891 5067423	827894	1462910	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chloroaniline	NPT	Ave	11659 1149601	53034 1623029	114352 2021912	344992	603164	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,6-Dichlorophenol	NPT	Ave	8747 855900	39095 1205517	81469 1498152	253773	442130	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorobutadiene	NPT	Ave	7478 721212	36985 1010727	69499 1239737	212950	371073	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Caprolactam	NPT	Ave	+++++ 218612	9793 302309	16953 375374	61720	104064	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chloro-3-methylphenol	NPT	Ave	8408 773634	34664 1082586	75786 1362666	235075	406397	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86218

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2013 05:24 Calibration End Date: 10/09/2013 08:22 Calibration ID: 11737

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
2-Methylnaphthalene	NPT	Ave	21035 2031903	92608 2815030	190626 3524728	599012	1020687	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1-Methylnaphthalene	NPT	Ave	19144 1840064	88821 2564965	174686 3212198	536012	931194	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorocyclopentadiene	ANT	Ave	6970 865191	31944 1234770	71918 1551969	232795	423316	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2,4,5-Tetrachlorobenzene	ANT	Ave	12721 1135207	54913 1597401	111384 2033708	332611	597152	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,6-Trichlorophenol	ANT	Ave	6825 669838	28285 913289	59408 1142395	189964	329847	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,5-Trichlorophenol	ANT	Ave	6417 678568	32231 975395	65077 1201212	200605	350621	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,1'-Biphenyl	ANT	Ave	26269 2308538	111373 3269661	227230 4141694	679494	1194970	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Chloronaphthalene	ANT	Ave	23180 1925643	97316 2871986	190229 3540962	596538	949708	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Nitroaniline	ANT	Ave	3726 457844	20770 634843	44961 777078	134743	236423	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dimethyl phthalate	ANT	Ave	20587 1904676	94720 2731022	192714 3330077	597058	1005891	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,3-Dinitrobenzene	ANT	Ave	2378 317406	13472 445481	28524 543146	97300	165993	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,6-Dinitrotoluene	ANT	Ave	3749 443853	20117 623755	42672 771970	139584	234335	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acenaphthylene	ANT	Ave	27512 2891918	129869 4065645	274054 5039132	842830	1469795	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
3-Nitroaniline	ANT	Ave	4188 428052	20183 615420	42763 754864	138464	225826	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Acenaphthene	ANT	Ave	19613 1845466	87147 2635053	174645 3275152	545227	938288	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4-Dinitrophenol	ANT	Qua	+++++ 598456	+++++ 913359	30547 1104967	146704	290693	+++++ 80.0	+++++ 120	8.00 160	20.0	40.0
4-Nitrophenol	ANT	Ave	3413 498598	21252 748984	46872 891824	151449	260409	0.800 80.0	4.00 120	8.00 160	20.0	40.0
2,4-Dinitrotoluene	ANT	Ave	4179 588778	25039 854498	57009 1029082	177222	301014	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dibenzofuran	ANT	Ave	26725 2485182	124075 3496797	252976 4298871	750647	1264033	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,3,5,6-Tetrachlorophenol	ANT	Ave	+++++ 591875	21712 855403	49885 1055326	166345	302973	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,3,4,6-Tetrachlorophenol	ANT	Ave	5577 580406	26457 838194	56953 1026246	180055	311074	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86218

SDG No.:

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2013 05:24 Calibration End Date: 10/09/2013 08:22 Calibration ID: 11737

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
2-Naphthylamine	ANT	Ave	14255 +++++	72935 +++++	149692 +++++	396689	541034	0.400 +++++	2.00 +++++	4.00 +++++	10.0	20.0
Diethyl phthalate	ANT	Ave	19060 1815485	85985 2602626	183685 3194370	556417	944854	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexadecane	NPT	Ave	8584 922745	40097 1347616	83858 1689045	261854	461937	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Chlorophenyl phenyl ether	ANT	Ave	11674 1139046	54833 1575076	112262 1979739	334522	571235	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Nitroaniline	ANT	Ave	3989 429947	18637 616043	40573 752891	130984	210269	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Fluorene	ANT	Ave	21435 1986246	96456 2874945	198299 3565301	601869	1032323	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4,6-Dinitro-2-methylphenol	PHN	Qua	+++++ 715257	+++++ 1030895	58444 1302489	224899	362398	+++++ 80.0	+++++ 120	8.00 160	20.0	40.0
N-Nitrosodiphenylamine	PHN	Ave	13228 1290795	65002 1880254	129680 2331095	410162	681904	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
1,2-Diphenylhydrazine(as Azobenzene)	PHN	Ave	16336 1707731	82589 2388157	175920 2900939	524970	883298	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
4-Bromophenyl phenyl ether	PHN	Ave	6885 621835	32674 892090	63921 1087753	191179	329788	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Hexachlorobenzene	PHN	Ave	6638 584470	29631 847059	59462 1035067	178508	304001	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Atrazine	PHN	Ave	5470 501000	26345 624990	58457 626011	173308	279300	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Pentachlorophenol	PHN	Qua	5494 817927	26128 1217739	50750 1550334	224270	401961	0.800 80.0	4.00 120	8.00 160	20.0	40.0
n-Octadecane	DCB	Ave	9545 906457	38211 1276387	83754 1618029	277262	457281	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenanthrene	PHN	Ave	29535 2641407	131904 3855172	274997 4715654	825480	1364770	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Anthracene	PHN	Ave	28974 2602298	133933 3721417	267990 4592910	840711	1392160	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Carbazole	PHN	Ave	26372 2219132	113049 3219467	234740 3905922	738707	1182392	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Di-n-butyl phthalate	PHN	Ave	25906 2659029	121153 3745485	270530 4632338	858378	1422955	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Fluoranthene	PHN	Ave	32079 2879095	147450 4241623	310858 4995600	984174	1528768	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzidine	CRY	Qua	3944 478591	45411 670037	102802 +++++	258632	344184	0.400 40.0	2.00 60.0	4.00 +++++	10.0	20.0
Pyrene	CRY	Ave	32282 2843375	147089 4114742	318565 5097924	966221	1558743	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86218

SDG No.:

Instrument ID: 733 GC Column: Rxi-5Sil MS ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/09/2013 05:24 Calibration End Date: 10/09/2013 08:22 Calibration ID: 11737

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Butyl benzyl phthalate	CRY	Ave	10062 1037330	43805 1515008	97819 1923043	342918	547918	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
3,3'-Dichlorobenzidine	CRY	Ave	8194 923163	38651 1420737	85151 1792581	292860	475611	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Bis(2-ethylhexyl) phthalate	CRY	Ave	+++++ 1387866	52936 2085333	127301 2612717	447394	719962	+++++ 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[a]anthracene	CRY	Ave	31822 2543174	130502 3816731	278251 4747142	857247	1354399	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Chrysene	CRY	Ave	25058 2301390	125915 3407037	258466 4269911	769702	1224590	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Di-n-octyl phthalate	PRY	Qua	15275 2280694	78029 3427323	183681 4415951	664163	1110938	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
7,12-Dimethylbenz(a)anthracene	PRY	Ave	8525 1141563	45933 1765374	99770 2262415	334991	563415	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[b]fluoranthene	PRY	Ave	23587 2542171	117127 3711529	242975 4833360	835571	1336863	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[k]fluoranthene	PRY	Ave	26863 2408086	121898 3723567	264691 4552825	792626	1199627	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[a]pyrene	PRY	Ave	20286 2219560	107699 3368483	216345 4313607	726944	1120607	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Indeno[1,2,3-cd]pyrene	PRY	Ave	21498 2328059	104927 3601564	216474 4601737	722868	1139707	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Dibenz(a,h)anthracene	PRY	Ave	17969 1927352	87476 3024933	180647 3934621	629421	960008	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Benzo[g,h,i]perylene	PRY	Ave	17517 1910738	86030 2999933	182056 3834570	622558	937220	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Fluorophenol (Surr)	DCB	Ave	8531 1030963	45407 1416039	96420 1754544	298162	522116	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Phenol-d5 (Surr)	DCB	Ave	11463 1178098	53289 1617320	111207 2027651	347807	600096	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Nitrobenzene-d5 (Surr)	NPT	Ave	9890 968923	47330 1339134	95561 1657703	288855	501299	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2-Fluorobiphenyl	ANT	Ave	22721 2263022	109347 3139069	221771 3978737	675048	1168088	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
2,4,6-Tribromophenol (Surr)	PHN	Ave	1753 223189	9837 324973	21116 386042	68164	113384	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0
Terphenyl-d14 (Surr)	CRY	Ave	25410 2138056	107398 3071238	234227 3780133	707458	1151303	0.400 40.0	2.00 60.0	4.00 80.0	10.0	20.0

Curve Type Legend:
Ave = Average ISTD
Qua = Quadratic ISTD

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86218/10 Calibration Date: 10/09/2013 08:47

Instrument ID: 733 Calib Start Date: 10/09/2013 05:24

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 10/09/2013 08:22

Lab File ID: N1009SV1.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5205	0.4981	0.0100	9.57	10.0	-4.3	30.0
N-Nitrosodimethylamine	Ave	0.6476	0.6251	0.0100	9.65	10.0	-3.5	30.0
Pyridine	Ave	1.180	1.184	0.0100	10.0	10.0	0.3	30.0
Benzaldehyde	Ave	0.9731	1.033	0.0100	10.6	10.0	6.2	30.0
Phenol	Ave	1.663	1.602	0.8000	9.63	10.0	-3.7	30.0
Aniline	Ave	1.752	1.622	0.0100	9.26	10.0	-7.4	30.0
Bis(2-chloroethyl)ether	Ave	1.056	1.015	0.7000	9.61	10.0	-3.9	30.0
2-Chlorophenol	Ave	1.310	1.284	0.8000	9.80	10.0	-2.0	30.0
1,3-Dichlorobenzene	Ave	1.573	1.559	0.0100	9.91	10.0	-0.9	30.0
1,4-Dichlorobenzene	Ave	1.611	1.537	0.0100	9.54	10.0	-4.6	30.0
Benzyl alcohol	Ave	0.7283	0.7280	0.0100	10.0	10.0	-0.0	30.0
1,2-Dichlorobenzene	Ave	1.506	1.450	0.0100	9.63	10.0	-3.7	30.0
2-Methylphenol	Ave	1.100	1.030	0.7000	9.36	10.0	-6.4	30.0
Indene	Ave	2.218	2.141	0.0100	9.66	10.0	-3.4	30.0
2,2'-oxybis[1-chloropropane]	Ave	1.153	1.166	0.0100	10.1	10.0	1.1	30.0
Acetophenone	Ave	1.796	1.623	0.0100	9.03	10.0	-9.7	30.0
Methylphenol, 3 & 4	Ave	1.153	1.105	0.6000	9.58	10.0	-4.2	30.0
N-Nitrosodi-n-propylamine	Ave	0.8019	0.7600	0.5000	9.48	10.0	-5.2	30.0
Hexachloroethane	Ave	0.6034	0.5870	0.3000	9.73	10.0	-2.7	30.0
Nitrobenzene	Ave	0.3603	0.3500	0.2000	9.71	10.0	-2.9	30.0
Isophorone	Ave	0.5783	0.5856	0.4000	10.1	10.0	1.3	30.0
2-Nitrophenol	Ave	0.1960	0.1945	0.1000	9.93	10.0	-0.7	30.0
2,4-Dimethylphenol	Ave	0.3160	0.2547	0.2000	8.06	10.0	-19.4	30.0
Benzoic acid	Qua	0.1556	0.1232	0.0100	9.07	10.0	-9.3	30.0
Bis(2-chloroethoxy)methane	Ave	0.3594	0.3362	0.3000	9.36	10.0	-6.4	30.0
2,4-Dichlorophenol	Ave	0.3260	0.3171	0.2000	9.73	10.0	-2.7	30.0
1,2,4-Trichlorobenzene	Ave	0.3981	0.3891	0.0100	9.77	10.0	-2.3	30.0
Naphthalene	Ave	1.061	1.014	0.7000	9.55	10.0	-4.5	30.0
4-Chloroaniline	Ave	0.4260	0.3887	0.0100	9.12	10.0	-8.8	30.0
Hexachlorobutadiene	Ave	0.2682	0.2626	0.0100	9.79	10.0	-2.1	30.0
Caprolactam	Ave	0.0763	0.0739	0.0100		10.0	-3.2	30.0
4-Chloro-3-methylphenol	Ave	0.2879	0.2887	0.2000	10.0	10.0	0.3	30.0
2-Methylnaphthalene	Ave	0.7396	0.6905	0.4000	9.34	10.0	-6.6	30.0
1-Methylnaphthalene	Ave	0.6766	0.6338	0.0100	9.37	10.0	-6.3	30.0
Hexachlorocyclopentadiene	Ave	0.5194	0.5568	0.0500	10.7	10.0	7.2	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.7583	0.7311	0.0100	9.64	10.0	-3.6	30.0
2,4,6-Trichlorophenol	Ave	0.4201	0.4233	0.2000	10.1	10.0	0.8	30.0
2,4,5-Trichlorophenol	Ave	0.4416	0.4411	0.2000	9.99	10.0	-0.1	30.0
1,1'-Biphenyl	Ave	1.545	1.495	0.0100	9.68	10.0	-3.2	30.0
2-Chloronaphthalene	Ave	1.320	1.155	0.8000	8.75	10.0	-12.5	30.0
2-Nitroaniline	Ave	0.2892	0.2962	0.0100	10.2	10.0	2.4	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86218/10 Calibration Date: 10/09/2013 08:47

Instrument ID: 733 Calib Start Date: 10/09/2013 05:24

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 10/09/2013 08:22

Lab File ID: N1009SV1.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dimethyl phthalate	Ave	1.286	1.278	0.0100	9.94	10.0	-0.6	30.0
1,3-Dinitrobenzene	Ave	0.1970	0.1976	0.0100	10.0	10.0	0.3	30.0
2,6-Dinitrotoluene	Ave	0.2853	0.2799	0.2000	9.81	10.0	-1.9	30.0
Acenaphthylene	Ave	1.852	1.846	0.9000	9.97	10.0	-0.3	30.0
3-Nitroaniline	Ave	0.2847	0.2828	0.0100	9.93	10.0	-0.7	30.0
2,4-Dinitrophenol	Qua	0.1794	0.1760	0.0100	18.7	20.0	-6.4	30.0
Acenaphthene	Ave	1.212	1.178	0.9000	9.72	10.0	-2.8	30.0
4-Nitrophenol	Ave	0.1566	0.1687	0.0100	21.5	20.0	7.7	30.0
2,4-Dinitrotoluene	Ave	0.3678	0.3715	0.2000	10.1	10.0	1.0	30.0
Dibenzofuran	Ave	1.657	1.583	0.8000	9.56	10.0	-4.4	30.0
2,3,4,6-Tetrachlorophenol	Ave	0.3819	0.3538	0.0100	9.27	10.0	-7.3	30.0
Diethyl phthalate	Ave	1.209	1.212	0.0100	10.0	10.0	0.3	30.0
4-Chlorophenyl phenyl ether	Ave	0.7433	0.7192	0.4000	9.68	10.0	-3.2	30.0
4-Nitroaniline	Ave	0.2743	0.2740	0.0100	9.99	10.0	-0.1	30.0
Fluorene	Ave	1.332	1.302	0.9000	9.78	10.0	-2.2	30.0
4,6-Dinitro-2-methylphenol	Qua	0.1475	0.1478	0.0100	20.2	20.0	1.0	30.0
N-Nitrosodiphenylamine	Ave	0.5434	0.5485	0.0100	10.1	10.0	1.0	30.0
4-Bromophenyl phenyl ether	Ave	0.2637	0.2531	0.1000	9.60	10.0	-4.0	30.0
Hexachlorobenzene	Ave	0.2472	0.2320	0.1000	9.38	10.0	-6.2	30.0
Atrazine	Ave	0.2083	0.2173	0.0100	10.4	10.0	4.3	30.0
Pentachlorophenol	Qua	0.1473	0.1572	0.0500	19.2	20.0	-3.8	30.0
Phenanthrene	Ave	1.120	1.059	0.7000	9.45	10.0	-5.5	30.0
Anthracene	Ave	1.110	1.073	0.7000	9.67	10.0	-3.3	30.0
Carbazole	Ave	0.9611	0.9222	0.0100	9.60	10.0	-4.0	30.0
Di-n-butyl phthalate	Ave	1.095	1.117	0.0100	10.2	10.0	2.0	30.0
Fluoranthene	Ave	1.244	1.247	0.6000	10.0	10.0	0.2	30.0
Benzidine	Qua	0.2846	0.2338	0.0100		10.0	-19.2	30.0
Pyrene	Ave	1.270	1.256	0.6000	9.89	10.0	-1.1	30.0
Butyl benzyl phthalate	Ave	0.4337	0.4641	0.0100	10.7	10.0	7.0	30.0
3,3'-Dichlorobenzidine	Ave	0.3827	0.4119	0.0100	10.8	10.0	7.6	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.5761	0.6134	0.0100		10.0	6.5	30.0
Benzo[a]anthracene	Ave	1.152	1.117	0.8000	9.70	10.0	-3.0	30.0
Chrysene	Ave	1.031	1.048	0.7000	10.2	10.0	1.6	30.0
Di-n-octyl phthalate	Qua	1.125	1.238	0.0100	10.2	10.0	1.7	30.0
Benzo[b]fluoranthene	Ave	1.392	1.337	0.7000	9.60	10.0	-4.0	30.0
Benzo[k]fluoranthene	Ave	1.389	1.389	0.7000	10.0	10.0	0.0	30.0
Benzo[a]pyrene	Ave	1.226	1.212	0.7000	9.88	10.0	-1.2	30.0
Indeno[1,2,3-cd]pyrene	Ave	1.263	1.183	0.5000	9.37	10.0	-6.3	30.0
Dibenz(a,h)anthracene	Ave	1.064	1.047	0.4000	9.84	10.0	-1.6	30.0
Benzo[g,h,i]perylene	Ave	1.049	1.029	0.5000	9.81	10.0	-1.9	30.0
2-Fluorophenol (Surr)	Ave	1.245	1.204		9.67	10.0	-3.3	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86218/10 Calibration Date: 10/09/2013 08:47

Instrument ID: 733 Calib Start Date: 10/09/2013 05:24

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 10/09/2013 08:22

Lab File ID: N1009SV1.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Phenol-d5 (Surr)	Ave	1.463	1.405		9.61	10.0	-3.9	30.0
Nitrobenzene-d5 (Surr)	Ave	0.3582	0.3467		9.68	10.0	-3.2	30.0
2-Fluorobiphenyl	Ave	1.483	1.432		9.65	10.0	-3.5	30.0
2,4,6-Tribromophenol (Surr)	Ave	0.0879	0.0851	0.0100	9.68	10.0	-3.2	30.0
Terphenyl-d14 (Surr)	Ave	0.9466	0.9219		9.74	10.0	-2.6	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86218/11 Calibration Date: 10/09/2013 09:13

Instrument ID: 733 Calib Start Date: 10/09/2013 05:24

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 10/09/2013 08:22

Lab File ID: N1009SV2.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methyl methanesulfonate	Ave	0.7469	0.6859	0.0100	9.18	10.0	-8.2	30.0
N-Nitrosopyrrolidine	Ave	0.4779	0.4817	0.0100	10.1	10.0	0.8	30.0
2,6-Dichlorophenol	Ave	0.3140	0.2963	0.0100	9.43	10.0	-5.7	30.0
2,3,5,6-Tetrachlorophenol	Ave	0.3681	0.3271	0.0100	8.89	10.0	-11.1	30.0
2-Naphthylamine	Ave	0.8837	1.071	0.0100	12.1	10.0	21.2	30.0
7,12-Dimethylbenz(a)anthracene	Ave	0.5900	0.5900	0.0100	10.0	10.0	-0.0	30.0

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Sample No.: ICIS 180-86218/5 Date Analyzed: 10/09/2013 06:40

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): N1009IC4.D Heated Purge: (Y/N) N

Calibration ID: 11737

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		188114	6.25	668301	7.48	372720	9.14
UPPER LIMIT		376228	6.75	1336602	7.98	745440	9.64
LOWER LIMIT		94057	5.75	334151	6.98	186360	8.64
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 180-86218/10		164615	6.25	561006	7.48	314870	9.13
ICV 180-86218/11		182254	6.24	613109	7.46	345462	9.12

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Sample No.: ICIS 180-86218/5 Date Analyzed: 10/09/2013 06:40

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): N1009IC4.D Heated Purge: (Y/N) N

Calibration ID: 11737

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		628542	10.53	617714	14.13	478556	17.09
UPPER LIMIT		1257084	11.03	1235428	14.63	957112	17.59
LOWER LIMIT		314271	10.03	308857	13.63	239278	16.59
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 180-86218/10		509056	10.53	495383	14.13	377355	17.09
ICV 180-86218/11		542107	10.52	536512	14.11	434037	17.05

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab File ID: N1017DF1.D DFTPP Injection Date: 10/17/2013

Instrument ID: 733 DFTPP Injection Time: 10:57

Analysis Batch No.: 87081

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	34.9	
68	Less than 2.0 % of mass 69	0.7	(1.8)1
69	Mass 69 relative abundance	40.0	
70	Less than 2.0 % of mass 69	0.5	(1.1)1
127	40.0 - 60.0 % of mass 198	44.1	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	7.7	
275	10.0 - 30.0 % of mass 198	26.8	
365	Greater than 1.0 % of mass 198	3.3	
441	Present but less than mass 443	6.1	(51.6)3
442	Greater than 40.0 % of mass 198	60.5	
443	17.0 - 23.0 % of mass 442	11.8	(19.6)2

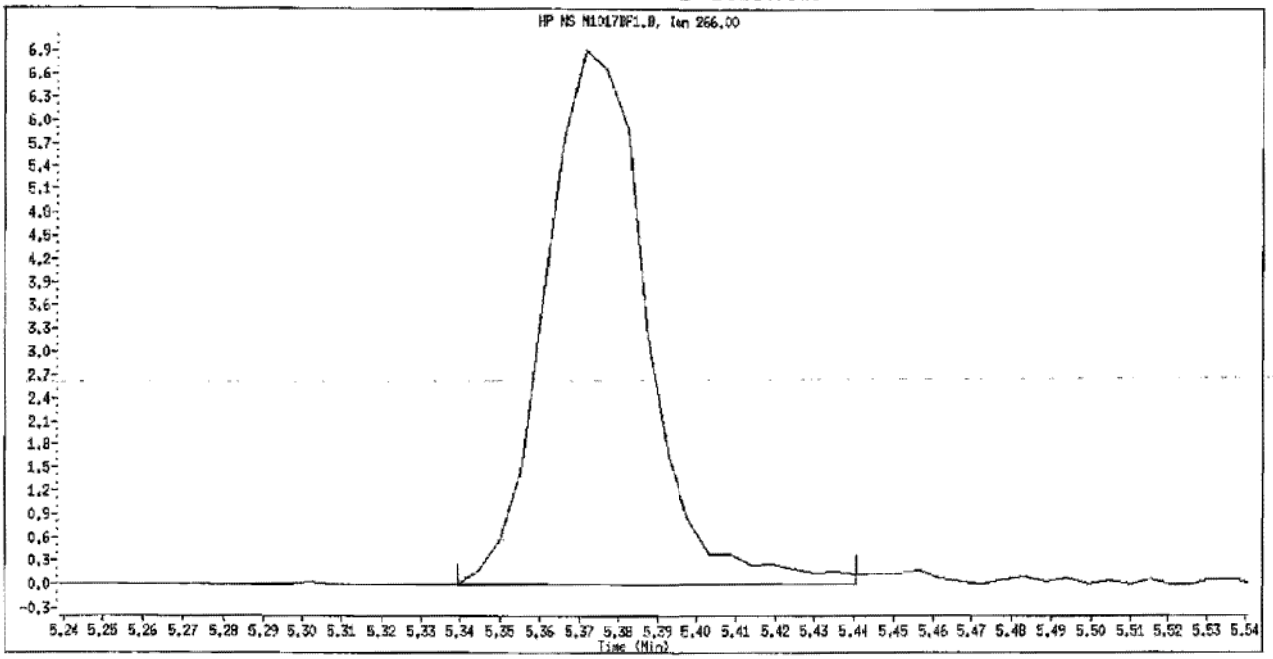
1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

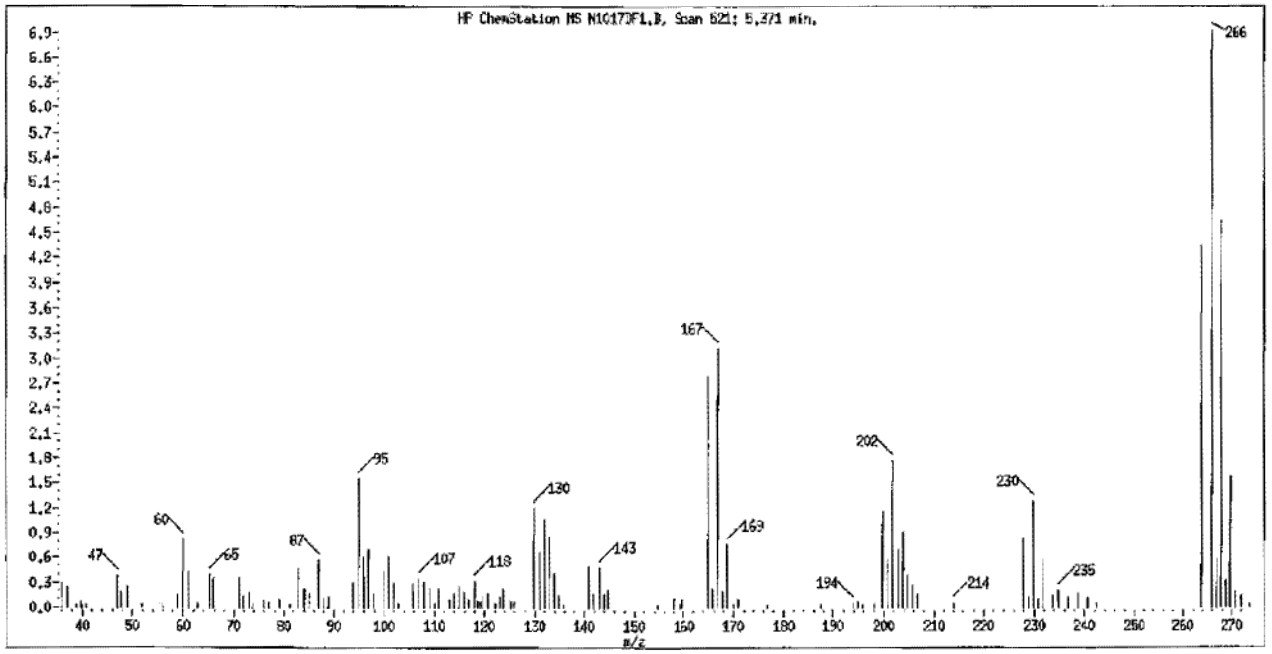
THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-87081/25	N10170CC.D	10/17/2013	11:11
	MB 180-86837/1-A	N1017005.D	10/17/2013	12:03
	LCS 180-86837/2-A	N1017006.D	10/17/2013	13:20
MB-MW-02-20131009	180-26012-1	N1017007.D	10/17/2013	14:12
MB-MW-02-20131009 MS	180-26012-1 MS	N1017008.D	10/17/2013	15:04
MB-MW-02-20131009 MSD	180-26012-1 MSD	N1017009.D	10/17/2013	15:31
MB-MW-01-20131009	180-26012-2	N1017010.D	10/17/2013	15:57
MB-MW-03-20131009	180-26012-3	N1017011.D	10/17/2013	16:23
MB-EB-20131009	180-26012-4	N1017012.D	10/17/2013	16:49
MB-MW-04-20131009	180-26012-5	N1017013.D	10/17/2013	17:15
DUP-20131009	180-26012-7	N1017014.D	10/17/2013	17:41

Data File: N1017DF1.D
Inj Date: 17-OCT-2013 10:57
Instrument ID: 733.i
Compound Name: Pentachlorophenol
Operator Name: 3200
Report Date: 10/18/2013

TAILING FACTOR

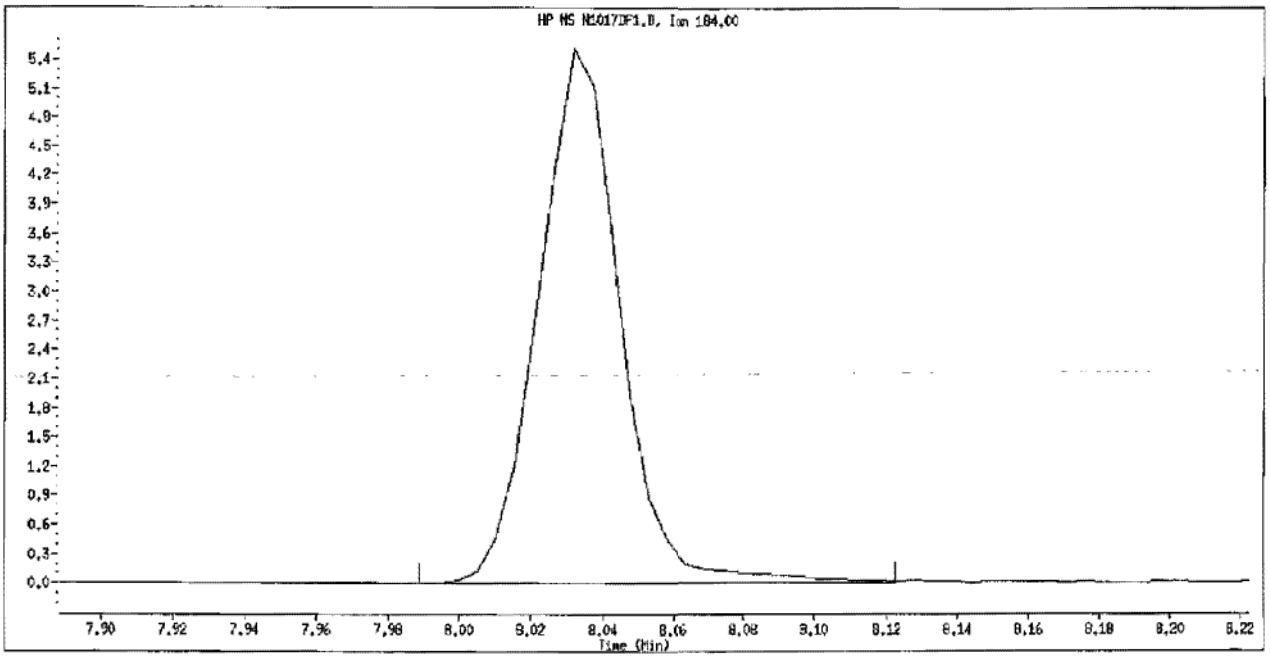


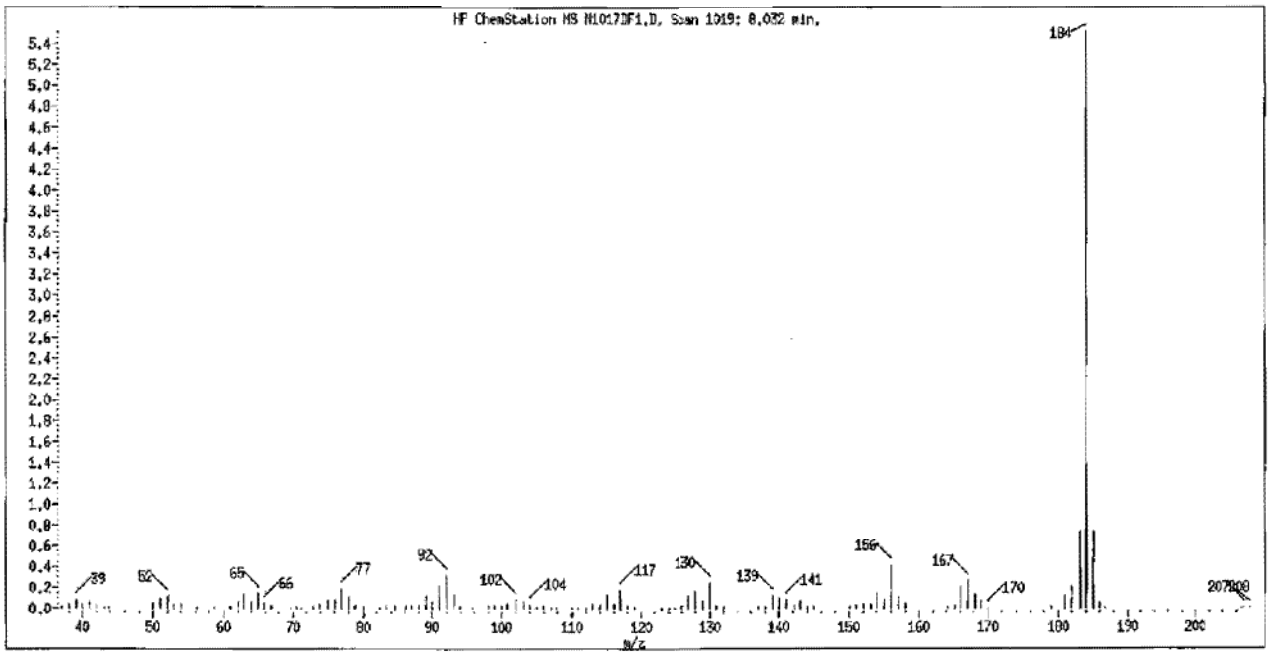


Tailing Factor = 1.38 Good
Acceptance Criteria 0 - 2
Tailing Factor = (T3 - T2) / (T2 - T1)
T1 = 5.350571 T2 = 5.371233 T3 = 5.399678

Data File: N1017DF1.D
Inj Date: 17-OCT-2013 10:57
Instrument ID: 733.i
Compound Name: Benzidine
Operator Name: 3200
Report Date: 10/18/2013

TAILING FACTOR

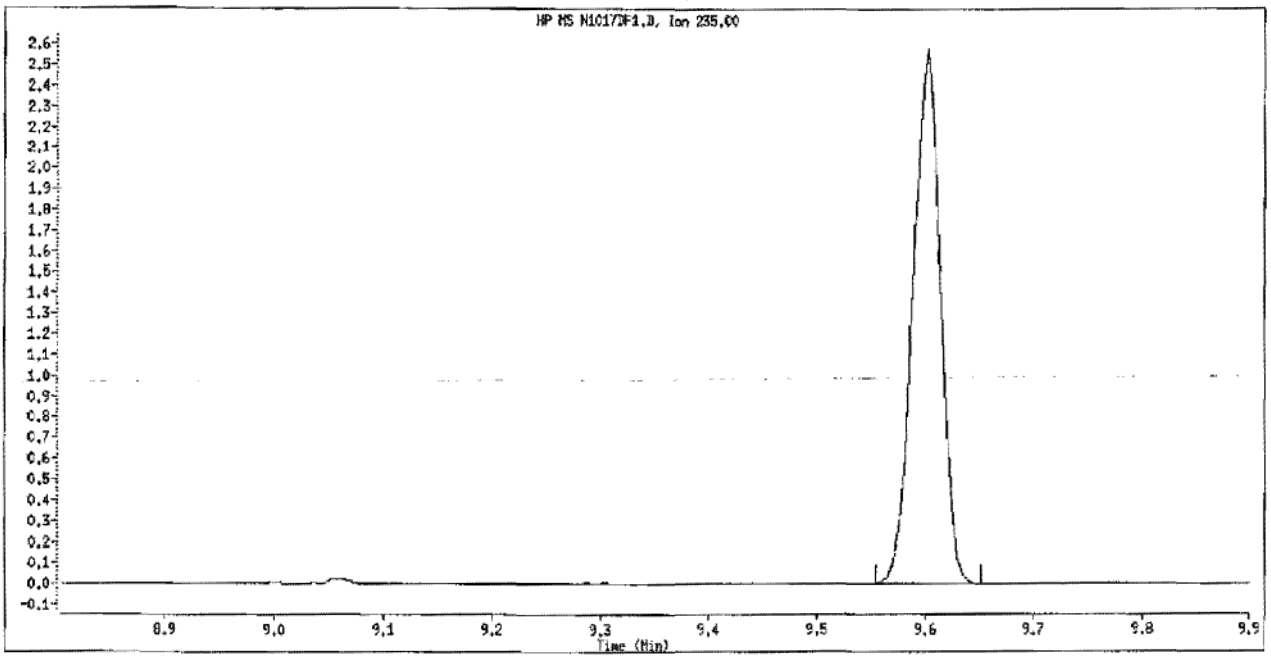




Tailing Factor = 1.23 Good
Acceptance Criteria 0 - 2
Tailing Factor = (T3 - T2) / (T2 - T1)
T1 = 8.010969 T2 = 8.0316 T3 = 8.056931

Data File: N1017DF1.D
Inj Date: 17-OCT-2013 10:57
Instrument ID: 733.i
Compound Name: 4,4'-DDT
Operator Name: 3200
Report Date: 10/18/2013

DEGRADATION REPORT



Degradation = 0.0568% Good
Acceptance Criteria 0 - 20 %
DDT Area = 457746
DDE Area = 260
DDD Area = 0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCVIS 180-87081/25 Calibration Date: 10/17/2013 11:11

Instrument ID: 733 Calib Start Date: 10/09/2013 05:24

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 10/09/2013 08:22

Lab File ID: N10170CC.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5205	0.4699	0.0100	4.51	5.00	-9.7	20.0
N-Nitrosodimethylamine	Ave	0.6476	0.6418	0.0100	4.96	5.00	-0.9	20.0
Pyridine	Ave	1.180	1.154	0.0100	4.89	5.00	-2.2	20.0
Methyl methanesulfonate	Ave	0.7469	0.7457	0.0100	4.99	5.00	-0.1	20.0
Benzaldehyde	Ave	0.9731	0.9710	0.0100	4.99	5.00	-0.2	20.0
Phenol	Ave	1.663	1.592	0.8000	4.79	5.00	-4.2	20.0
Aniline	Ave	1.752	1.799	0.0100	5.14	5.00	2.7	20.0
Bis(2-chloroethyl)ether	Ave	1.056	1.045	0.7000	4.95	5.00	-1.0	20.0
2-Chlorophenol	Ave	1.310	1.283	0.8000	4.90	5.00	-2.1	20.0
1,3-Dichlorobenzene	Ave	1.573	1.606	0.0100	5.10	5.00	2.0	20.0
1,4-Dichlorobenzene	Ave	1.611	1.595	0.0100	4.95	5.00	-1.0	20.0
Benzyl alcohol	Ave	0.7283	0.6986	0.0100	4.80	5.00	-4.1	20.0
1,2-Dichlorobenzene	Ave	1.506	1.509	0.0100	5.01	5.00	0.2	20.0
2-Methylphenol	Ave	1.100	1.050	0.7000	4.77	5.00	-4.5	20.0
Indene	Ave	2.218	2.146	0.0100	4.84	5.00	-3.2	20.0
2,2'-oxybis[1-chloropropane]	Ave	1.153	1.087	0.0100	4.71	5.00	-5.7	20.0
N-Nitrosopyrrolidine	Ave	0.4779	0.4709	0.0100	4.93	5.00	-1.5	20.0
Acetophenone	Ave	1.796	1.654	0.0100	4.60	5.00	-7.9	20.0
N-Nitrosodi-n-propylamine	Ave	0.8019	0.7873	0.5000	4.91	5.00	-1.8	20.0
Methylphenol, 3 & 4	Ave	1.153	1.104	0.6000	4.79	5.00	-4.2	20.0
Hexachloroethane	Ave	0.6034	0.6082	0.3000	5.04	5.00	0.8	20.0
Nitrobenzene	Ave	0.3603	0.3383	0.2000	4.69	5.00	-6.1	20.0
Isophorone	Ave	0.5783	0.5439	0.4000	4.70	5.00	-6.0	20.0
2-Nitrophenol	Ave	0.1960	0.1934	0.1000	4.93	5.00	-1.3	20.0
2,4-Dimethylphenol	Ave	0.3160	0.2863	0.2000	4.53	5.00	-9.4	20.0
Benzoic acid	Qua	0.1556	0.1386	0.0100	9.91	10.0	-0.9	20.0
Bis(2-chloroethoxy)methane	Ave	0.3594	0.3304	0.3000	4.60	5.00	-8.1	20.0
2,4-Dichlorophenol	Ave	0.3260	0.3173	0.2000	4.87	5.00	-2.7	20.0
1,2,4-Trichlorobenzene	Ave	0.3981	0.3920	0.0100	4.92	5.00	-1.5	20.0
Naphthalene	Ave	1.061	1.010	0.7000	4.76	5.00	-4.9	20.0
4-Chloroaniline	Ave	0.4260	0.4085	0.0100	4.79	5.00	-4.1	20.0
2,6-Dichlorophenol	Ave	0.3140	0.3107	0.0100	4.95	5.00	-1.1	20.0
Hexachlorobutadiene	Ave	0.2682	0.2610	0.0100	4.86	5.00	-2.7	20.0
Caprolactam	Ave	0.0763	0.0717	0.0100	4.76	5.00	-6.1	20.0
4-Chloro-3-methylphenol	Ave	0.2879	0.2771	0.2000	4.81	5.00	-3.7	20.0
2-Methylnaphthalene	Ave	0.7396	0.6928	0.4000	4.68	5.00	-6.3	20.0
1-Methylnaphthalene	Ave	0.6766	0.6479	0.0100	4.79	5.00	-4.2	20.0
Hexachlorocyclopentadiene	Ave	0.5194	0.4890	0.0500	4.71	5.00	-5.9	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.7583	0.7426	0.0100	4.90	5.00	-2.1	20.0
2,4,6-Trichlorophenol	Ave	0.4201	0.4074	0.2000	4.85	5.00	-3.0	20.0
2,4,5-Trichlorophenol	Ave	0.4416	0.4220	0.2000	4.78	5.00	-4.4	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCVIS 180-87081/25 Calibration Date: 10/17/2013 11:11

Instrument ID: 733 Calib Start Date: 10/09/2013 05:24

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 10/09/2013 08:22

Lab File ID: N10170CC.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1'-Biphenyl	Ave	1.545	1.463	0.0100	4.74	5.00	-5.3	20.0
2-Chloronaphthalene	Ave	1.320	1.220	0.8000	4.62	5.00	-7.5	20.0
2-Nitroaniline	Ave	0.2892	0.2863	0.0100	4.95	5.00	-1.0	20.0
Dimethyl phthalate	Ave	1.286	1.244	0.0100	4.84	5.00	-3.3	20.0
1,3-Dinitrobenzene	Ave	0.1970	0.2009	0.0100	5.10	5.00	1.9	20.0
2,6-Dinitrotoluene	Ave	0.2853	0.2850	0.2000	5.00	5.00	-0.1	20.0
Acenaphthylene	Ave	1.852	1.783	0.9000	4.82	5.00	-3.7	20.0
3-Nitroaniline	Ave	0.2847	0.2793	0.0100	4.91	5.00	-1.9	20.0
2,4-Dinitrophenol	Qua	0.1794	0.1639	0.0100	10.2	10.0	1.7	20.0
Acenaphthene	Ave	1.212	1.106	0.9000	4.56	5.00	-8.8	20.0
4-Nitrophenol	Ave	0.1566	0.1599	0.0100	10.2	10.0	2.1	20.0
2,4-Dinitrotoluene	Ave	0.3678	0.3707	0.2000	5.04	5.00	0.8	20.0
Dibenzofuran	Ave	1.657	1.571	0.8000	4.74	5.00	-5.2	20.0
2,3,5,6-Tetrachlorophenol	Ave	0.3681	0.3712	0.0100	5.04	5.00	0.8	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3819	0.3798	0.0100	4.97	5.00	-0.5	20.0
2-Naphthylamine	Ave	0.8837	0.8014	0.0100	4.53	5.00	-9.3	20.0
Diethyl phthalate	Ave	1.209	1.146	0.0100	4.74	5.00	-5.2	20.0
4-Chlorophenyl phenyl ether	Ave	0.7433	0.7102	0.4000	4.78	5.00	-4.4	20.0
4-Nitroaniline	Ave	0.2743	0.2517	0.0100	4.59	5.00	-8.2	20.0
Fluorene	Ave	1.332	1.249	0.9000	4.69	5.00	-6.3	20.0
4,6-Dinitro-2-methylphenol	Qua	0.1475	0.1458	0.0100	10.4	10.0	4.2	20.0
N-Nitrosodiphenylamine	Ave	0.5434	0.5301	0.0100	4.88	5.00	-2.4	20.0
4-Bromophenyl phenyl ether	Ave	0.2637	0.2634	0.1000	4.99	5.00	-0.1	20.0
Hexachlorobenzene	Ave	0.2472	0.2491	0.1000	5.04	5.00	0.8	20.0
Atrazine	Ave	0.2083	0.2176	0.0100	5.22	5.00	4.5	20.0
Pentachlorophenol	Qua	0.1473	0.1427	0.0500	9.44	10.0	-5.6	20.0
Phenanthrene	Ave	1.120	1.069	0.7000	4.77	5.00	-4.6	20.0
Anthracene	Ave	1.110	1.093	0.7000	4.92	5.00	-1.5	20.0
Carbazole	Ave	0.9611	0.9304	0.0100	4.84	5.00	-3.2	20.0
Di-n-butyl phthalate	Ave	1.095	1.111	0.0100	5.07	5.00	1.4	20.0
Fluoranthene	Ave	1.244	1.247	0.6000	5.01	5.00	0.2	20.0
Benzidine	Qua	0.2846	0.3404	0.0100	[illegible]	5.00	7.3	20.0
Pyrene	Ave	1.270	1.269	0.6000	5.00	5.00	-0.0	20.0
Butyl benzyl phthalate	Ave	0.4337	0.4504	0.0100	5.19	5.00	3.9	20.0
3,3'-Dichlorobenzidine	Ave	0.3827	0.3982	0.0100	5.20	5.00	4.0	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.5761	0.5973	0.0100	5.18	5.00	3.7	20.0
Benzo[a]anthracene	Ave	1.152	1.108	0.8000	4.81	5.00	-3.8	20.0
Chrysene	Ave	1.031	1.004	0.7000	4.87	5.00	-2.6	20.0
Di-n-octyl phthalate	Qua	1.125	1.199	0.0100	5.12	5.00	2.4	20.0
7,12-Dimethylbenz(a)anthracene	Ave	0.5900	0.5530	0.0100	4.69	5.00	-6.3	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCVIS 180-87081/25 Calibration Date: 10/17/2013 11:11

Instrument ID: 733 Calib Start Date: 10/09/2013 05:24

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 10/09/2013 08:22

Lab File ID: N10170CC.D Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[b]fluoranthene	Ave	1.392	1.379	0.7000	4.95	5.00	-1.0	20.0
Benzo[k]fluoranthene	Ave	1.389	1.287	0.7000	4.64	5.00	-7.3	20.0
Benzo[a]pyrene	Ave	1.226	1.218	0.7000	4.97	5.00	-0.7	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.263	1.257	0.5000	4.98	5.00	-0.4	20.0
Dibenz(a,h)anthracene	Ave	1.064	1.053	0.4000	4.95	5.00	-1.0	20.0
Benzo[g,h,i]perylene	Ave	1.049	1.044	0.5000	4.97	5.00	-0.5	20.0
2-Fluorophenol (Surr)	Ave	1.245	1.253		5.03	5.00	0.7	20.0
Phenol-d5 (Surr)	Ave	1.463	1.432		4.89	5.00	-2.1	20.0
Nitrobenzene-d5 (Surr)	Ave	0.3582	0.3397		4.74	5.00	-5.2	20.0
2-Fluorobiphenyl	Ave	1.483	1.442		4.86	5.00	-2.8	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.0879	0.0888	0.0100	5.05	5.00	1.1	20.0
Terphenyl-d14 (Surr)	Ave	0.9466	0.9510		5.02	5.00	0.5	20.0

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN101713D.b\N10170CC.D
Lab Smp Id: CCVIS 984622
Inj Date : 17-OCT-2013 11:11
Operator : 001562 Inst ID: 733.i
Smp Info : CCVIS 984622
Misc Info : TN101713D.b,T8270d.m,tapitt.sub
Comment :
Method : \\PITSVR06\D\chem\733.i\TN101713D.b\T8270d.m
Meth Date : 17-Oct-2013 11:57 piccolinov Quant Type: ISTD
Cal Date : 09-OCT-2013 08:22 Cal File: N1009IC8.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: tapitt.sub
Target Version: 4.14
Processing Host: PITPC-502

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 1	1,4-Dichlorobenzene-d4	152	6.271	6.271	(1.000)	173140	8.00000	
* 2	Naphthalene-d8	136	7.505	7.505	(1.000)	611193	8.00000	
* 3	Acenaphthene-d10	164	9.156	9.156	(1.000)	342713	8.00000	
* 4	Phenanthrene-d10	188	10.540	10.540	(1.000)	542033	8.00000	
* 5	Chrysene-d12	240	14.113	14.113	(1.000)	525782	8.00000	
* 6	Perylene-d12	264	17.062	17.062	(1.000)	408674	8.00000	
198	1,4-Dioxane	88	1.693	1.693	(0.270)	101706	10.0000	9.0278
10	N-Nitrosodimethylamine	74	2.318	2.318	(0.370)	138909	10.0000	9.9111(M)
9	Pyridine	79	2.387	2.387	(0.381)	249824	10.0000	9.7809(M)
16	Methyl methanesulfonate	80	4.642	4.642	(0.740)	161397	10.0000	9.9851
206	Benzaldehyde	77	5.817	5.817	(0.928)	210147	10.0000	9.9782
21	Aniline	93	5.935	5.935	(0.946)	389388	10.0000	10.271
22	Phenol	94	5.924	5.924	(0.945)	344624	10.0000	9.5765
23	bis(2-Chloroethyl)ether	93	6.004	6.004	(0.957)	226259	10.0000	9.9003
24	2-Chlorophenol	128	6.063	6.063	(0.967)	277626	10.0000	9.7917
226	n-Decane	43	6.127	6.127	(0.977)	207680	10.0000	9.6751
26	1,3-Dichlorobenzene	146	6.218	6.218	(0.991)	347487	10.0000	10.205
27	1,4-Dichlorobenzene	146	6.293	6.293	(1.003)	345140	10.0000	9.9015
28	1,2-Dichlorobenzene	146	6.442	6.442	(1.027)	326486	10.0000	10.018
217	Indene	116	6.528	6.528	(1.041)	464407	10.0000	9.6759
29	Benzyl Alcohol	108	6.405	6.405	(1.021)	151202	10.0000	9.5925
30	2-Methylphenol	108	6.522	6.522	(1.040)	227226	10.0000	9.5453
31	2,2'-oxybis(1-Chloropropane)	45	6.538	6.538	(1.043)	235268	10.0000	9.4251
37	Acetophenone	105	6.661	6.661	(1.062)	358056	10.0000	9.2100
32	N-Nitroso-di-n-propylamine	70	6.661	6.661	(1.062)	170396	10.0000	9.8184
192	4-Methylphenol	108	6.667	6.667	(1.063)	238975	10.0000	9.5770
34	Hexachloroethane	117	6.779	6.779	(1.081)	131618	10.0000	10.079
77	1,3-Dinitrobenzene	168	8.905	8.905	(0.973)	86041	10.0000	10.194

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
35 Nitrobenzene	77	6.827	6.827	(0.910)	258474	10.0000	9.3891
36 N-Nitrosopyrrolidine	100	6.629	6.629	(1.057)	101912	10.0000	9.8540
41 Isophorone	82	7.051	7.051	(0.940)	415531	10.0000	9.4048
42 2-Nitrophenol	139	7.137	7.137	(0.951)	147753	10.0000	9.8677
43 2,4-Dimethylphenol	107	7.169	7.169	(0.955)	218713	10.0000	9.0600
44 bis(2-Chloroethoxy)methane	93	7.254	7.254	(0.967)	252392	10.0000	9.1922
48 2,4-Dichlorophenol	162	7.366	7.365	(0.981)	242420	10.0000	9.7342
49 Benzoic Acid	122	7.238	7.238	(0.964)	211768	20.0000	19.819(M)
50 1,2,4-Trichlorobenzene	180	7.452	7.452	(0.993)	299463	10.0000	9.8458
51 Naphthalene	128	7.527	7.527	(1.003)	771345	10.0000	9.5134
52 4-Chloroaniline	127	7.564	7.564	(1.008)	312075	10.0000	9.5879
54 2,6-Dichlorophenol	162	7.580	7.580	(1.010)	237370	10.0000	9.8940
56 Hexachlorobutadiene	225	7.649	7.649	(1.019)	199378	10.0000	9.7299
208 Caprolactam	113	7.863	7.863	(1.048)	54747	10.0000	9.3910(H)
59 4-Chloro-3-Methylphenol	107	8.013	8.013	(1.068)	211694	10.0000	9.6256
62 2-Methylnaphthalene	142	8.178	8.178	(1.090)	529320	10.0000	9.3681
63 1-Methylnaphthalene	142	8.274	8.274	(1.102)	494983	10.0000	9.5764
64 Hexachlorocyclopentadiene	237	8.333	8.333	(0.910)	209465	10.0000	9.4131
65 1,2,4,5-Tetrachlorobenzene	216	8.339	8.339	(0.911)	318114	10.0000	9.7929
66 2,4,6-Trichlorophenol	196	8.435	8.435	(0.921)	174529	10.0000	9.6980
67 2,4,5-Trichlorophenol	196	8.472	8.472	(0.925)	180783	10.0000	9.5568
209 1,1'-Biphenyl	154	8.606	8.605	(0.940)	626849	10.0000	9.4734
70 2-Chloronaphthalene	162	8.638	8.638	(0.943)	522653	10.0000	9.2450
73 2-Nitroaniline	65	8.718	8.718	(0.952)	122656	10.0000	9.9007
76 Dimethylphthalate	163	8.867	8.867	(0.968)	532806	10.0000	9.6746
78 2,6-Dinitrotoluene	165	8.932	8.932	(0.975)	122089	10.0000	9.9901
79 Acenaphthylene	152	9.028	9.028	(0.986)	763981	10.0000	9.6320
81 3-Nitroaniline	138	9.092	9.092	(0.993)	119659	10.0000	9.8127
82 Acenaphthene	153	9.188	9.188	(1.004)	473654	10.0000	9.1215
83 2,4-Dinitrophenol	184	9.188	9.188	(1.004)	140448	20.0000	20.338
85 4-Nitrophenol	109	9.225	9.225	(1.008)	137018	20.0000	20.426
86 Dibenzofuran	168	9.343	9.343	(1.020)	673064	10.0000	9.4831
87 2,4-Dinitrotoluene	165	9.306	9.306	(1.016)	158783	10.0000	10.076
91 2,3,5,6-Tetrachlorophenol	232	9.418	9.418	(1.029)	159009	10.0000	10.084
88 2,3,4,6-Tetrachlorophenol	232	9.455	9.455	(1.033)	162714	10.0000	9.9467
92 2-Naphthylamine	143	9.482	9.482	(1.036)	343320	10.0000	9.0688
93 Diethylphthalate	149	9.509	9.509	(1.039)	491135	10.0000	9.4825
230 n-Hexadecane	57	9.514	9.514	(1.268)	236071	10.0000	9.3161
94 Fluorene	166	9.663	9.663	(1.055)	534924	10.0000	9.3737
95 4-Chlorophenyl-phenylether	204	9.642	9.642	(1.053)	304246	10.0000	9.5550
96 4-Nitroaniline	138	9.658	9.658	(1.055)	107810	10.0000	9.1755
98 4,6-Dinitro-2-methylphenol	198	9.685	9.685	(0.919)	197614	20.0000	20.844
99 N-Nitrosodiphenylamine (1)	169	9.749	9.749	(0.925)	359152	10.0000	9.7553
100 1,2-Diphenylhydrazine	77	9.792	9.792	(0.929)	459163	10.0000	9.7143
106 4-Bromophenyl-phenylether	248	10.096	10.096	(0.958)	178466	10.0000	9.9875
107 Hexachlorobenzene	284	10.187	10.187	(0.967)	168766	10.0000	10.075
210 Atrazine	200	10.214	10.214	(0.969)	147450	10.0000	10.447
227 n-Octadecane	57	10.358	10.358	(1.652)	234975	10.0000	9.5444
111 Pentachlorophenol	266	10.358	10.358	(0.983)	193389	20.0000	18.880
115 Phenanthrene	178	10.566	10.565	(1.003)	724601	10.0000	9.5446
116 Anthracene	178	10.614	10.614	(1.007)	740857	10.0000	9.8474
119 Carbazole	167	10.759	10.759	(1.021)	630361	10.0000	9.6805
120 Di-n-Butylphthalate	149	11.052	11.052	(1.049)	752667	10.0000	10.142
123 Fluoranthene	202	11.875	11.875	(1.127)	844653	10.0000	10.018

9.591/2 = 4.76

Value not reported on Summary form.

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
124 Benzidine	184	12.003	12.003	(0.850)	223692	10.0000	10.729
125 Pyrene	202	12.180	12.180	(0.863)	834209	10.0000	9.9978
131 Butylbenzylphthalate	149	13.040	13.040	(0.924)	296033	10.0000	10.386
135 3,3'-Dichlorobenzidine	252	14.012	14.012	(0.993)	261692	10.0000	10.404
136 Benzo(a)Anthracene	228	14.097	14.097	(0.999)	728333	10.0000	9.6228
137 Chrysene	228	14.167	14.167	(1.004)	660176	10.0000	9.7434
139 bis(2-ethylhexyl)Phthalate	149	14.049	14.049	(0.995)	392583	10.0000	10.368
140 Di-n-octylphthalate	149	15.364	15.364	(0.900)	612410	10.0000	10.238
141 Benzo(b)fluoranthene	252	16.261	16.261	(0.953)	704224	10.0000	9.9008
142 Benzo(k)fluoranthene	252	16.314	16.314	(0.956)	657680	10.0000	9.2721
143 7,12-dimethylbenz[a]anthracen	256	16.240	16.240	(0.952)	282480	10.0000	9.3723
146 Benzo(a)pyrene	252	16.945	16.945	(0.993)	622246	10.0000	9.9315
149 Indeno(1,2,3-cd)pyrene	276	19.306	19.306	(1.131)	642186	10.0000	9.9551
150 Dibenz(a,h)anthracene	278	19.333	19.333	(1.133)	537953	10.0000	9.8965
151 Benzo(g,h,i)perylene	276	19.910	19.910	(1.167)	533092	10.0000	9.9477
$ 154 Nitrobenzene-d5	82	6.811	6.811	(0.907)	259512	10.0000	9.4817
$ 155 2-Fluorobiphenyl	172	8.510	8.510	(0.929)	617731	10.0000	9.7203
$ 156 Terphenyl-d14	244	12.340	12.340	(0.874)	625049	10.0000	10.047
$ 157 Phenol-d5	99	5.913	5.913	(0.943)	309870	10.0000	9.7890
$ 158 2-Fluorophenol	112	4.888	4.888	(0.779)	271271	10.0000	10.069
$ 159 2,4,6-Tribromophenol	330	9.888	9.888	(0.938)	60191	10.0000	10.105

10.363/2 = 5.18

Value not reported on the summary form.

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Sample No.: CCVIS 180-87081/25 Date Analyzed: 10/17/2013 11:11

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): N10170CC.D Heated Purge: (Y/N) N

Calibration ID: 11737

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		173140	6.27	611193	7.51	342713	9.16
UPPER LIMIT		346280	6.77	1222386	8.01	685426	9.66
LOWER LIMIT		86570	5.77	305597	7.01	171357	8.66
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-86837/1-A		161981	6.29	570930	7.52	334864	9.16
LCS 180-86837/2-A		154806	6.29	532428	7.51	292267	9.16
180-26012-1	MB-MW-02-20131009	99679	6.28	327565	7.51	198447	9.16
180-26012-1 MS	MB-MW-02-20131009 MS	114719	6.27	385652	7.51	226083	9.15
180-26012-1 MSD	MB-MW-02-20131009 MSD	123161	6.27	404275	7.50	231245	9.15
180-26012-2	MB-MW-01-20131009	151911	6.28	500291	7.50	266450	9.15
180-26012-3	MB-MW-03-20131009	168055	6.29	585853	7.51	324663	9.16
180-26012-4	MB-EB-20131009	169486	6.27	610405	7.50	347050	9.15
180-26012-5	MB-MW-04-20131009	141774	6.28	447415	7.51	235937	9.16
180-26012-7	DUP-20131009	146745	6.28	461749	7.51	247124	9.16

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Sample No.: CCVIS 180-87081/25 Date Analyzed: 10/17/2013 11:11

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): N10170CC.D Heated Purge: (Y/N) N

Calibration ID: 11737

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		542033	10.54	525782	14.11	408674	17.06
UPPER LIMIT		1084066	11.04	1051564	14.61	817348	17.56
LOWER LIMIT		271017	10.04	262891	13.61	204337	16.56
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-86837/1-A		563932	10.54	504560	14.10	377143	17.04
LCS 180-86837/2-A		471209	10.54	459457	14.10	387551	17.04
180-26012-1	MB-MW-02-20131009	340744	10.55	471560	14.11	606500	17.06
180-26012-1 MS	MB-MW-02-20131009 MS	391216	10.53	505505	14.10	668380	17.04
180-26012-1 MSD	MB-MW-02-20131009 MSD	396605	10.54	501724	14.09	670988	17.04
180-26012-2	MB-MW-01-20131009	427432	10.53	444854	14.09	408619	17.02
180-26012-3	MB-MW-03-20131009	513956	10.54	481143	14.10	388023	17.04
180-26012-4	MB-EB-20131009	584615	10.53	529593	14.08	408311	17.01
180-26012-5	MB-MW-04-20131009	372490	10.54	406709	14.09	367737	17.04
180-26012-7	DUP-20131009	394237	10.54	406935	14.10	367637	17.03

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab File ID: N1018DF1.D DFTPP Injection Date: 10/18/2013

Instrument ID: 733 DFTPP Injection Time: 11:16

Analysis Batch No.: 87196

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	32.2	
68	Less than 2.0 % of mass 69	0.3	(0.7)1
69	Mass 69 relative abundance	39.0	
70	Less than 2.0 % of mass 69	0.3	(0.8)1
127	40.0 - 60.0 % of mass 198	45.7	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.8	
275	10.0 - 30.0 % of mass 198	24.8	
365	Greater than 1.0 % of mass 198	2.3	
441	Present but less than mass 443	10.4	(82.0)3
442	Greater than 40.0 % of mass 198	60.9	
443	17.0 - 23.0 % of mass 442	12.7	(20.8)2

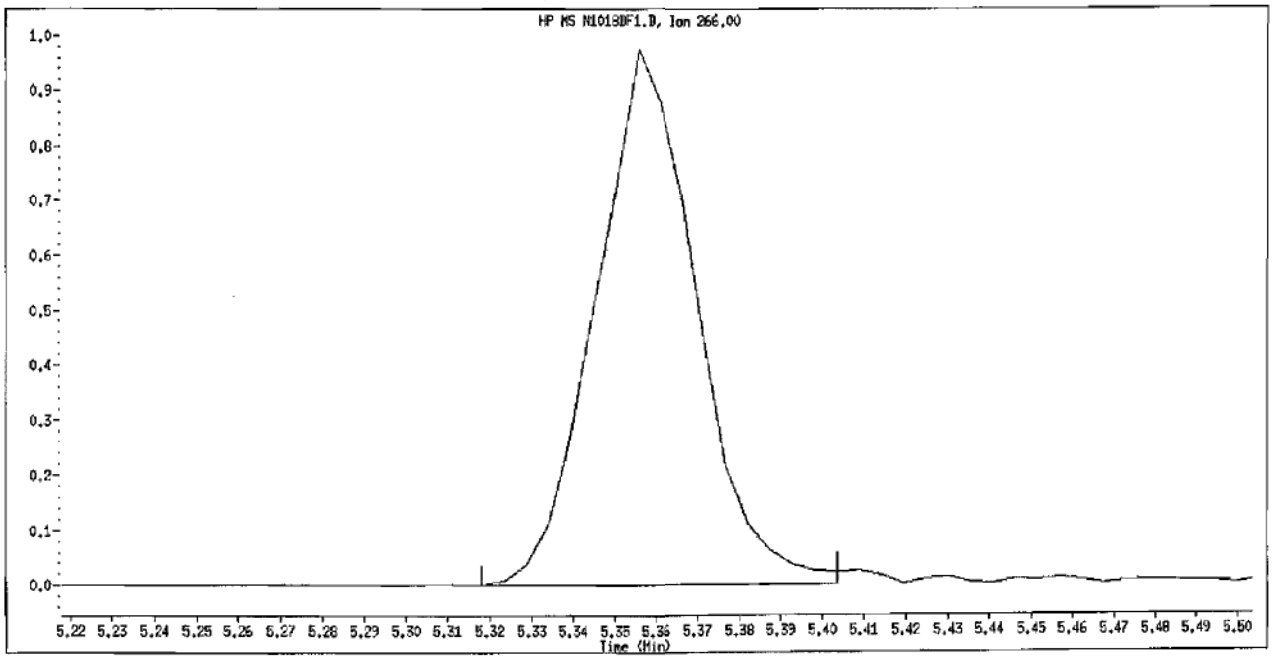
1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

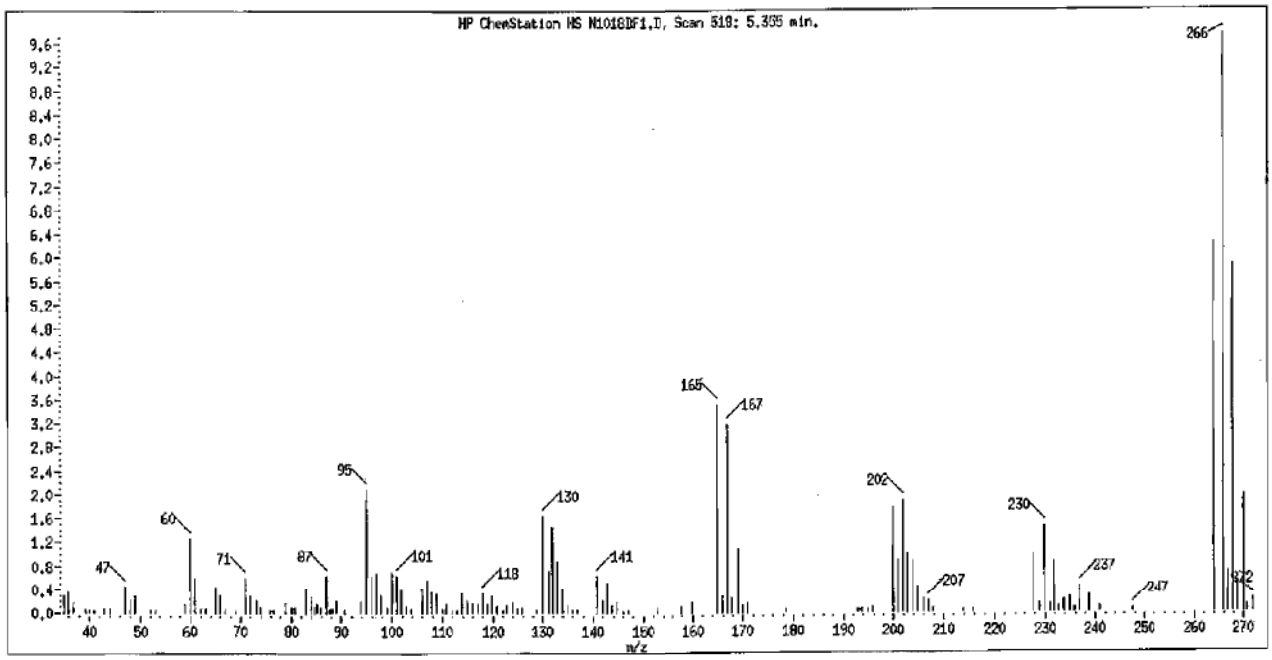
THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-87196/8	N10180CC.D	10/18/2013	11:31
	MB 180-86943/1-A	N1018002.D	10/18/2013	11:57
	LCS 180-86943/2-A	N1018003.D	10/18/2013	12:48
	LCSD 180-86943/3-A	N1018004.D	10/18/2013	13:14
MB-MW-06-20131010	180-26012-6	N1018005.D	10/18/2013	14:32
MB-MW-05-20131010	180-26012-8	N1018006.D	10/18/2013	14:58
MB-EB-20131010	180-26012-9	N1018007.D	10/18/2013	15:24

Data File: N1018DF1.D
Inj Date: 18-OCT-2013 11:16
Instrument ID: 733.i
Compound Name: Pentachlorophenol
Operator Name: 3200
Report Date: 10/19/2013

TAILING FACTOR

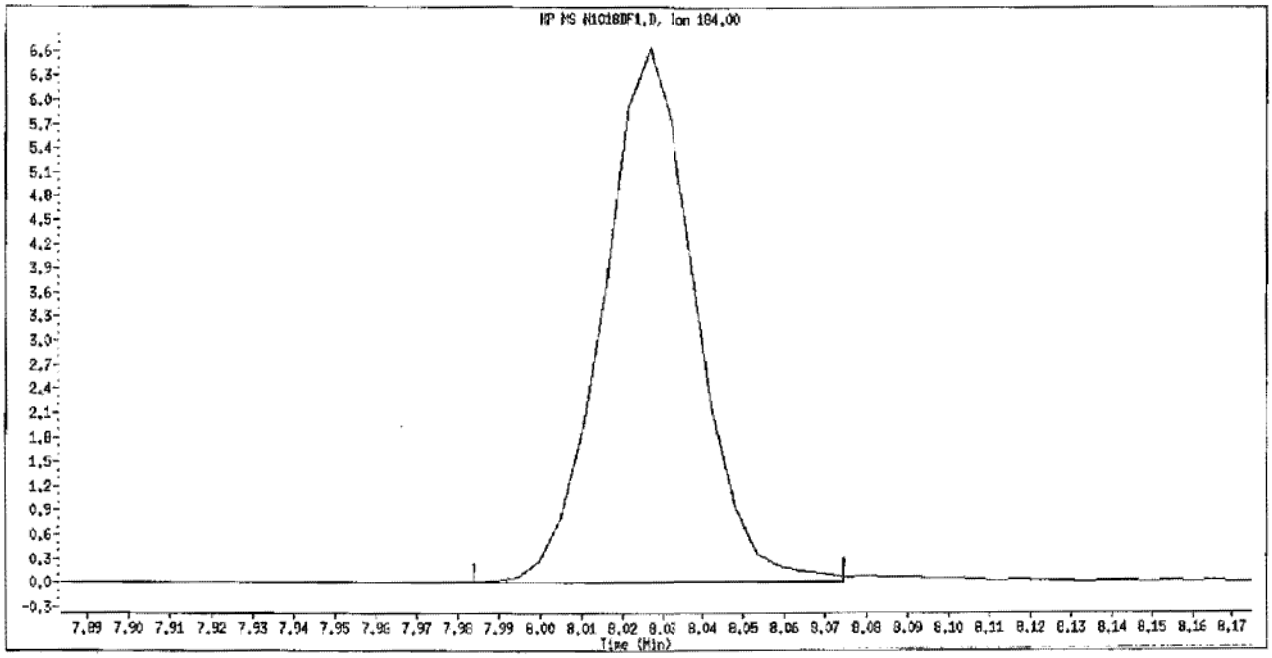


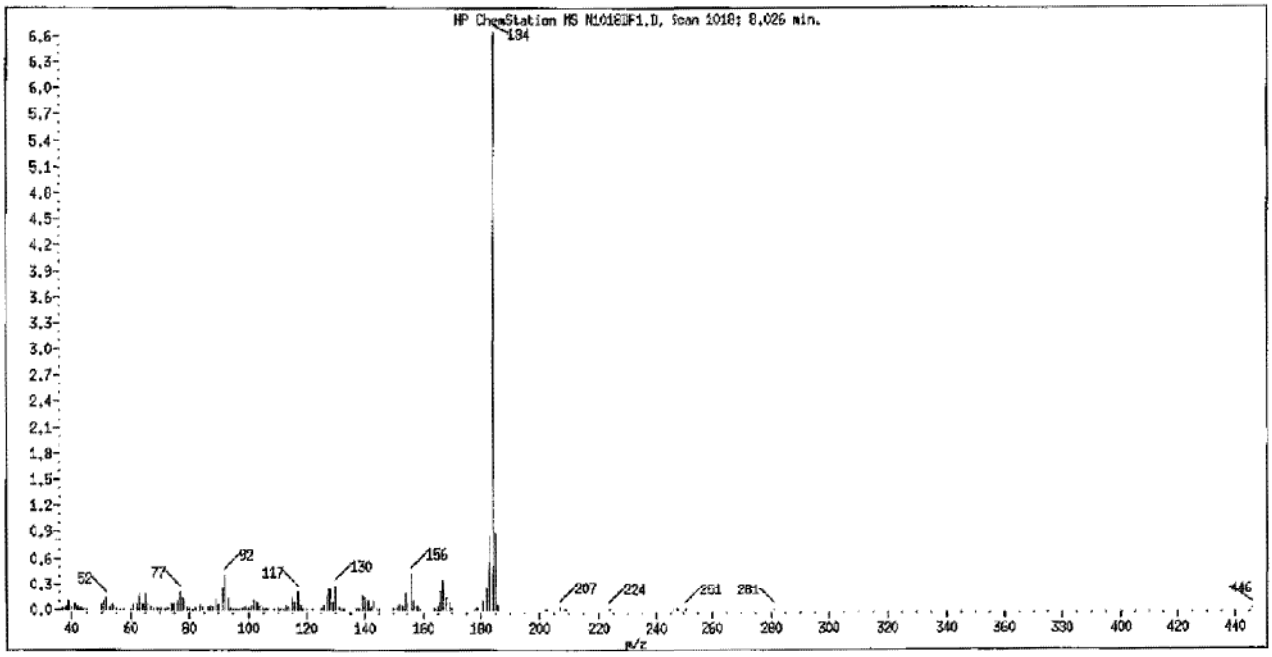


Tailing Factor = 1.26 Good
Acceptance Criteria 0 - 2
Tailing Factor = (T3 - T2) / (T2 - T1)
T1 = 5.332948 T2 = 5.355417 T3 = 5.383617

Data File: N1018DF1.D
Inj Date: 18-OCT-2013 11:16
Instrument ID: 733.i
Compound Name: Benzidine
Operator Name: 3200
Report Date: 10/19/2013

TAILING FACTOR

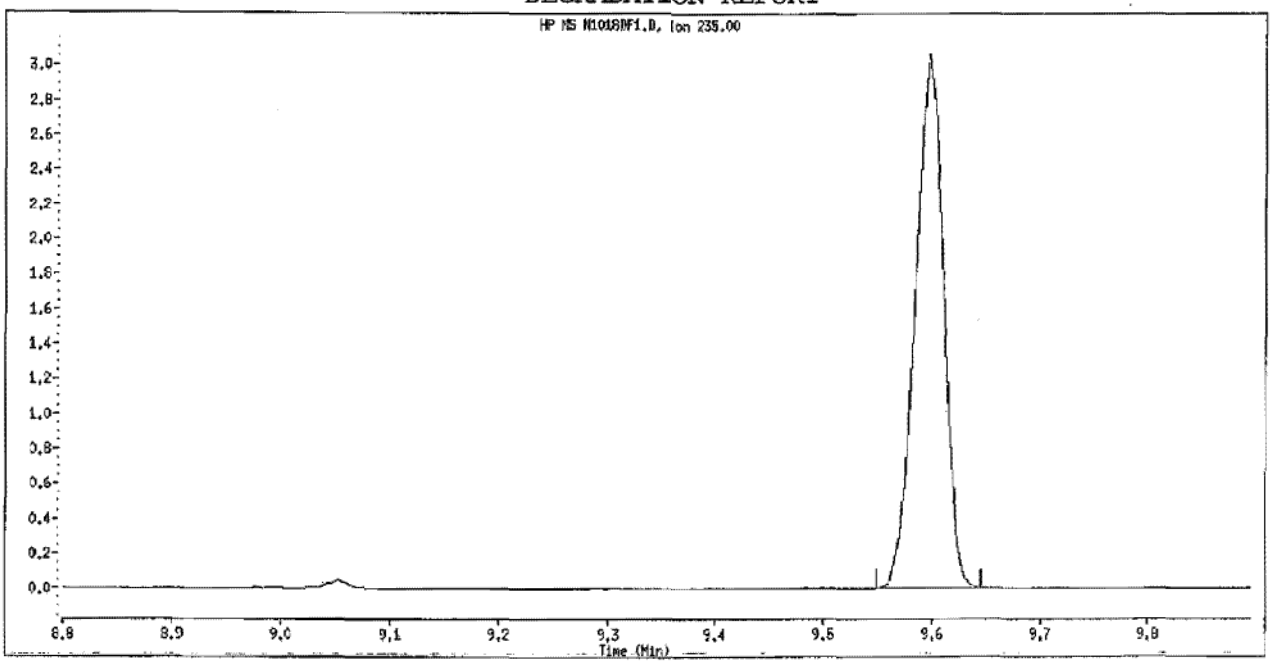




Tailing Factor = 1.05 Good
Acceptance Criteria 0 - 2
Tailing Factor = (T3 - T2) / (T2 - T1)
T1 = 8.003584 T2 = 8.026483 T3 = 8.050419

Data File: N1018DF1.D
Inj Date: 18-OCT-2013 11:16
Instrument ID: 733.i
Compound Name: 4,4'-DDT
Operator Name: 3200
Report Date: 10/19/2013

DEGRADATION REPORT



Degradation = 0.0219% Good
Acceptance Criteria 0 - 20 %
DDT Area = 561156
DDE Area = 123
DDD Area = 0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCVIS 180-87196/8 Calibration Date: 10/18/2013 11:31

Instrument ID: 733 Calib Start Date: 10/09/2013 05:24

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 10/09/2013 08:22

Lab File ID: N10180CC.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5205	0.4566	0.0100	4.39	5.00	-12.3	20.0
N-Nitrosodimethylamine	Ave	0.6476	0.5932	0.0100	4.58	5.00	-8.4	20.0
Pyridine	Ave	1.180	1.121	0.0100	4.75	5.00	-5.0	20.0
Methyl methanesulfonate	Ave	0.7469	0.6925	0.0100	4.64	5.00	-7.3	20.0
Benzaldehyde	Ave	0.9731	0.9462	0.0100	4.86	5.00	-2.8	20.0
Phenol	Ave	1.663	1.503	0.8000	4.52	5.00	-9.6	20.0
Aniline	Ave	1.752	1.747	0.0100	4.99	5.00	-0.3	20.0
Bis(2-chloroethyl)ether	Ave	1.056	0.9689	0.7000	4.59	5.00	-8.3	20.0
2-Chlorophenol	Ave	1.310	1.261	0.8000	4.81	5.00	-3.8	20.0
1,3-Dichlorobenzene	Ave	1.573	1.523	0.0100	4.84	5.00	-3.2	20.0
1,4-Dichlorobenzene	Ave	1.611	1.538	0.0100	4.77	5.00	-4.5	20.0
Benzyl alcohol	Ave	0.7283	0.6950	0.0100	4.77	5.00	-4.6	20.0
1,2-Dichlorobenzene	Ave	1.506	1.456	0.0100	4.83	5.00	-3.3	20.0
2-Methylphenol	Ave	1.100	1.049	0.7000	4.77	5.00	-4.6	20.0
Indene	Ave	2.218	2.102	0.0100	4.74	5.00	-5.2	20.0
2,2'-oxybis[1-chloropropane]	Ave	1.153	1.049	0.0100	4.55	5.00	-9.1	20.0
N-Nitrosopyrrolidine	Ave	0.4779	0.4683	0.0100	4.90	5.00	-2.0	20.0
Acetophenone	Ave	1.796	1.618	0.0100	4.50	5.00	-9.9	20.0
N-Nitrosodi-n-propylamine	Ave	0.8019	0.7475	0.5000	4.66	5.00	-6.8	20.0
Methylphenol, 3 & 4	Ave	1.153	1.078	0.6000	4.67	5.00	-6.5	20.0
Hexachloroethane	Ave	0.6034	0.5734	0.3000	4.75	5.00	-5.0	20.0
Nitrobenzene	Ave	0.3603	0.3328	0.2000	4.62	5.00	-7.7	20.0
Isophorone	Ave	0.5783	0.5516	0.4000	4.77	5.00	-4.6	20.0
2-Nitrophenol	Ave	0.1960	0.1954	0.1000	4.99	5.00	-0.3	20.0
2,4-Dimethylphenol	Ave	0.3160	0.2778	0.2000	4.40	5.00	-12.1	20.0
Benzoic acid	Qua	0.1556	0.1584	0.0100	11.0	10.0	9.9	20.0
Bis(2-chloroethoxy)methane	Ave	0.3594	0.3339	0.3000	4.65	5.00	-7.1	20.0
2,4-Dichlorophenol	Ave	0.3260	0.3283	0.2000	5.04	5.00	0.7	20.0
1,2,4-Trichlorobenzene	Ave	0.3981	0.3906	0.0100	4.91	5.00	-1.9	20.0
Naphthalene	Ave	1.061	1.001	0.7000	4.72	5.00	-5.6	20.0
4-Chloroaniline	Ave	0.4260	0.3990	0.0100	4.68	5.00	-6.4	20.0
2,6-Dichlorophenol	Ave	0.3140	0.3084	0.0100	4.91	5.00	-1.8	20.0
Hexachlorobutadiene	Ave	0.2682	0.2616	0.0100	4.88	5.00	-2.5	20.0
Caprolactam	Ave	0.0763	0.0775	0.0100	5.08	5.00	1.5	20.0
4-Chloro-3-methylphenol	Ave	0.2879	0.2718	0.2000	4.72	5.00	-5.6	20.0
2-Methylnaphthalene	Ave	0.7396	0.7231	0.4000	4.89	5.00	-2.2	20.0
1-Methylnaphthalene	Ave	0.6766	0.6455	0.0100	4.77	5.00	-4.6	20.0
Hexachlorocyclopentadiene	Ave	0.5194	0.5104	0.0500	4.91	5.00	-1.7	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.7583	0.7471	0.0100	4.93	5.00	-1.5	20.0
2,4,6-Trichlorophenol	Ave	0.4201	0.4483	0.2000	5.34	5.00	6.7	20.0
2,4,5-Trichlorophenol	Ave	0.4416	0.4428	0.2000	5.01	5.00	0.3	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCVIS 180-87196/8 Calibration Date: 10/18/2013 11:31

Instrument ID: 733 Calib Start Date: 10/09/2013 05:24

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 10/09/2013 08:22

Lab File ID: N10180CC.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1'-Biphenyl	Ave	1.545	1.499	0.0100	4.85	5.00	-3.0	20.0
2-Chloronaphthalene	Ave	1.320	1.263	0.8000	4.78	5.00	-4.3	20.0
2-Nitroaniline	Ave	0.2892	0.2894	0.0100	5.00	5.00	0.0	20.0
Dimethyl phthalate	Ave	1.286	1.263	0.0100	4.91	5.00	-1.8	20.0
1,3-Dinitrobenzene	Ave	0.1970	0.2051	0.0100	5.20	5.00	4.1	20.0
2,6-Dinitrotoluene	Ave	0.2853	0.2901	0.2000	5.08	5.00	1.7	20.0
Acenaphthylene	Ave	1.852	1.851	0.9000	5.00	5.00	-0.0	20.0
3-Nitroaniline	Ave	0.2847	0.2887	0.0100	5.07	5.00	1.4	20.0
2,4-Dinitrophenol	Qua	0.1794	0.1610	0.0100	10.0	10.0	0.4	20.0
Acenaphthene	Ave	1.212	1.171	0.9000	4.83	5.00	-3.4	20.0
4-Nitrophenol	Ave	0.1566	0.1486	0.0100	9.49	10.0	-5.1	20.0
2,4-Dinitrotoluene	Ave	0.3678	0.3872	0.2000	5.26	5.00	5.3	20.0
Dibenzofuran	Ave	1.657	1.591	0.8000	4.80	5.00	-4.0	20.0
2,3,5,6-Tetrachlorophenol	Ave	0.3681	0.3772	0.0100	5.12	5.00	2.5	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.3819	0.3851	0.0100	5.04	5.00	0.8	20.0
2-Naphthylamine	Ave	0.8837	0.8184	0.0100	4.63	5.00	-7.4	20.0
Diethyl phthalate	Ave	1.209	1.182	0.0100	4.89	5.00	-2.2	20.0
4-Chlorophenyl phenyl ether	Ave	0.7433	0.7399	0.4000	4.98	5.00	-0.5	20.0
4-Nitroaniline	Ave	0.2743	0.2565	0.0100	4.68	5.00	-6.5	20.0
Fluorene	Ave	1.332	1.298	0.9000	4.87	5.00	-2.5	20.0
4,6-Dinitro-2-methylphenol	Qua	0.1475	0.1299	0.0100	9.37	10.0	-6.3	20.0
N-Nitrosodiphenylamine	Ave	0.5434	0.5395	0.0100	4.96	5.00	-0.7	20.0
4-Bromophenyl phenyl ether	Ave	0.2637	0.2672	0.1000	5.07	5.00	1.3	20.0
Hexachlorobenzene	Ave	0.2472	0.2572	0.1000	5.20	5.00	4.0	20.0
Atrazine	Ave	0.2083	0.2278	0.0100	5.47	5.00	9.4	20.0
Pentachlorophenol	Qua	0.1473	0.1271	0.0500	8.53	10.0	-14.7	20.0
Phenanthrene	Ave	1.120	1.087	0.7000	4.85	5.00	-3.0	20.0
Anthracene	Ave	1.110	1.100	0.7000	4.96	5.00	-0.9	20.0
Carbazole	Ave	0.9611	0.9165	0.0100	4.77	5.00	-4.6	20.0
Di-n-butyl phthalate	Ave	1.095	1.078	0.0100	4.92	5.00	-1.6	20.0
Fluoranthene	Ave	1.244	1.233	0.6000	4.95	5.00	-0.9	20.0
Benzidine — MA Target	Qua	0.2846	0.2783	0.0100	(MA Target)	5.00	-16.6	20.0
Pyrene	Ave	1.270	1.263	0.6000	4.97	5.00	-0.5	20.0
Butyl benzyl phthalate	Ave	0.4337	0.4598	0.0100	5.30	5.00	6.0	20.0
3,3'-Dichlorobenzidine	Ave	0.3827	0.3970	0.0100	5.19	5.00	3.7	20.0
Bis(2-ethylhexyl) phthalate —	Ave	0.5761	0.6218	0.0100	5.40	5.00	7.9	20.0
Benzo[a]anthracene ✓	Ave	1.152	1.110	0.8000	4.82	5.00	-3.6	20.0
Chrysene	Ave	1.031	0.995	0.7000	4.83	5.00	-3.5	20.0
Di-n-octyl phthalate	Qua	1.125	1.257	0.0100	5.35	5.00	7.1	20.0
7,12-Dimethylbenz(a)anthracene	Ave	0.5900	0.5544	0.0100	4.70	5.00	-6.0	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCVIS 180-87196/8 Calibration Date: 10/18/2013 11:31

Instrument ID: 733 Calib Start Date: 10/09/2013 05:24

GC Column: Rxi-5SilMS ID: 0.32(mm) Calib End Date: 10/09/2013 08:22

Lab File ID: N10180CC.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[b]fluoranthene	Ave	1.392	1.344	0.7000	4.83	5.00	-3.5	20.0
Benzo[k]fluoranthene	Ave	1.389	1.300	0.7000	4.68	5.00	-6.4	20.0
Benzo[a]pyrene	Ave	1.226	1.190	0.7000	4.85	5.00	-3.0	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.263	1.241	0.5000	4.92	5.00	-1.7	20.0
Dibenz(a,h)anthracene	Ave	1.064	1.063	0.4000	4.99	5.00	-0.1	20.0
Benzo[g,h,i]perylene	Ave	1.049	1.029	0.5000	4.90	5.00	-1.9	20.0
2-Fluorophenol (Surr)	Ave	1.245	1.206		4.84	5.00	-3.2	20.0
Phenol-d5 (Surr)	Ave	1.463	1.416		4.84	5.00	-3.2	20.0
Nitrobenzene-d5 (Surr)	Ave	0.3582	0.3379		4.72	5.00	-5.7	20.0
2-Fluorobiphenyl	Ave	1.483	1.465		4.94	5.00	-1.3	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.0879	0.0962	0.0100	5.47	5.00	9.4	20.0
Terphenyl-d14 (Surr)	Ave	0.9466	0.9496		5.02	5.00	0.3	20.0

TestAmerica Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\PITSVR06\D\chem\733.i\TN101813D.b\N10180CC.D
Lab Smp Id: CCVIS 984622
Inj Date : 18-OCT-2013 11:31
Operator : 3200 Inst ID: 733.i
Smp Info : CCVIS 984622
Misc Info : TN101813D.b,T8270d.m,tapitt.sub
Comment :
Method : \\PITSVR06\D\chem\733.i\TN101813D.b\T8270d.m
Meth Date : 19-Oct-2013 05:41 733.i Quant Type: ISTD
Cal Date : 09-OCT-2013 08:22 Cal File: N1009IC8.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: tapitt.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 1	1,4-Dichlorobenzene-d4	152	6.275	6.275	(1.000)	204457	8.00000	
* 2	Naphthalene-d8	136	7.520	7.520	(1.000)	712087	8.00000	
* 3	Acenaphthene-d10	164	9.176	9.176	(1.000)	399548	8.00000	
* 4	Phenanthrene-d10	188	10.565	10.565	(1.000)	645528	8.00000	
* 5	Chrysene-d12	240	14.160	14.160	(1.000)	614576	8.00000	
* 6	Perylene-d12	264	17.120	17.120	(1.000)	490762	8.00000	
198	1,4-Dioxane	88	1.702	1.702	(0.271)	116689	10.0000	8.7713
10	N-Nitrosodimethylamine	74	2.333	2.333	(0.372)	151606	10.0000	9.1602
9	Pyridine	79	2.402	2.402	(0.383)	286592	10.0000	9.5018(M)
16	Methyl methanesulfonate	80	4.641	4.641	(0.740)	176983	10.0000	9.2722
206	Benzaldehyde	77	5.821	5.821	(0.928)	241819	10.0000	9.7233
21	Aniline	93	5.939	5.939	(0.946)	446488	10.0000	9.9732
22	Phenol	94	5.933	5.933	(0.946)	384065	10.0000	9.0378
23	bis(2-Chloroethyl)ether	93	6.008	6.008	(0.957)	247609	10.0000	9.1749
24	2-Chlorophenol	128	6.067	6.067	(0.967)	322154	10.0000	9.6218
226	n-Decane	43	6.126	6.126	(0.976)	232120	10.0000	9.1573
26	1,3-Dichlorobenzene	146	6.222	6.222	(0.991)	389181	10.0000	9.6784
27	1,4-Dichlorobenzene	146	6.297	6.297	(1.003)	392942	10.0000	9.5462
28	1,2-Dichlorobenzene	146	6.452	6.452	(1.028)	371999	10.0000	9.6663
217	Indene	116	6.537	6.537	(1.042)	537194	10.0000	9.4780
29	Benzyl Alcohol	108	6.414	6.414	(1.022)	177620	10.0000	9.5425
30	2-Methylphenol	108	6.532	6.532	(1.041)	268183	10.0000	9.5402
31	2,2'-oxybis(1-Chloropropane)	45	6.548	6.548	(1.043)	267966	10.0000	9.0907
37	Acetophenone	105	6.671	6.671	(1.063)	413612	10.0000	9.0094
32	N-Nitroso-di-n-propylamine	70	6.671	6.671	(1.063)	191046	10.0000	9.3221
192	4-Methylphenol	108	6.676	6.676	(1.064)	275479	10.0000	9.3489
34	Hexachloroethane	117	6.788	6.788	(1.082)	146545	10.0000	9.5032
77	1,3-Dinitrobenzene	168	8.925	8.925	(0.973)	102436	10.0000	10.410
35	Nitrobenzene	77	6.836	6.836	(0.909)	296192	10.0000	9.2348

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
36	N-Nitrosopyrrolidine	100	6.639	6.639	(1.058)	119692	10.0000	9.8005
41	Isophorone	82	7.066	7.066	(0.940)	490982	10.0000	9.5380
42	2-Nitrophenol	139	7.146	7.146	(0.950)	173949	10.0000	9.9712
43	2,4-Dimethylphenol	107	7.184	7.184	(0.955)	247290	10.0000	8.7924
44	bis(2-Chloroethoxy)methane	93	7.264	7.264	(0.966)	297189	10.0000	9.2901
48	2,4-Dichlorophenol	162	7.381	7.381	(0.982)	292247	10.0000	10.072
49	Benzoic Acid	122	7.264	7.264	(0.966)	281922	20.0000	21.972(M)
50	1,2,4-Trichlorobenzene	180	7.461	7.461	(0.992)	347638	10.0000	9.8102
51	Naphthalene	128	7.541	7.541	(1.003)	891346	10.0000	9.4358
52	4-Chloroaniline	127	7.579	7.579	(1.008)	355130	10.0000	9.3648
54	2,6-Dichlorophenol	162	7.595	7.595	(1.010)	274483	10.0000	9.8199
56	Hexachlorobutadiene	225	7.659	7.659	(1.018)	232886	10.0000	9.7548
208	Caprolactam	113	7.889	7.889	(1.049)	68944	10.0000	10.151
59	4-Chloro-3-Methylphenol	107	8.033	8.033	(1.068)	241913	10.0000	9.4412
62	2-Methylnaphthalene	142	8.193	8.193	(1.090)	643618	10.0000	9.7770
63	1-Methylnaphthalene	142	8.289	8.289	(1.102)	574538	10.0000	9.5406
64	Hexachlorocyclopentadiene	237	8.348	8.348	(0.910)	254917	10.0000	9.8261
65	1,2,4,5-Tetrachlorobenzene	216	8.353	8.353	(0.910)	373113	10.0000	9.8521
66	2,4,6-Trichlorophenol	196	8.455	8.455	(0.921)	223906	10.0000	10.672
67	2,4,5-Trichlorophenol	196	8.492	8.492	(0.925)	221151	10.0000	10.028
209	1,1'-Biphenyl	154	8.626	8.626	(0.940)	748570	10.0000	9.7037
70	2-Chloronaphthalene	162	8.658	8.658	(0.944)	630560	10.0000	9.5672
73	2-Nitroaniline	65	8.738	8.738	(0.952)	144557	10.0000	10.009
76	Dimethylphthalate	163	8.888	8.888	(0.969)	630786	10.0000	9.8244
78	2,6-Dinitrotoluene	165	8.952	8.952	(0.976)	144873	10.0000	10.168
79	Acenaphthylene	152	9.048	9.048	(0.986)	924280	10.0000	9.9954
81	3-Nitroaniline	138	9.117	9.117	(0.994)	144184	10.0000	10.142
82	Acenaphthene	153	9.208	9.208	(1.003)	584610	10.0000	9.6568
83	2,4-Dinitrophenol	184	9.208	9.208	(1.003)	160855	20.0000	20.075
85	4-Nitrophenol	109	9.251	9.251	(1.008)	148389	20.0000	18.975
86	Dibenzofuran	168	9.368	9.368	(1.021)	794489	10.0000	9.6016
87	2,4-Dinitrotoluene	165	9.331	9.331	(1.017)	193370	10.0000	10.525
91	2,3,5,6-Tetrachlorophenol	232	9.438	9.438	(1.029)	188380	10.0000	10.247
88	2,3,4,6-Tetrachlorophenol	232	9.475	9.475	(1.033)	192334	10.0000	10.085
92	2-Naphthylamine	143	9.507	9.507	(1.036)	408752	10.0000	9.2612
93	Diethylphthalate	149	9.534	9.534	(1.039)	590434	10.0000	9.7781
230	n-Hexadecane	57	9.539	9.539	(1.269)	266356	10.0000	9.0219
94	Fluorene	166	9.689	9.689	(1.056)	648354	10.0000	9.7452
95	4-Chlorophenyl-phenylether	204	9.668	9.668	(1.054)	369535	10.0000	9.9546
96	4-Nitroaniline	138	9.684	9.684	(1.055)	128082	10.0000	9.3502
98	4,6-Dinitro-2-methylphenol	198	9.710	9.710	(0.919)	209674	20.0000	18.733
99	N-Nitrosodiphenylamine (1)	169	9.769	9.769	(0.925)	435317	10.0000	9.9284
100	1,2-Diphenylhydrazine	77	9.812	9.812	(0.929)	519741	10.0000	9.2330
106	4-Bromophenyl-phenylether	248	10.122	10.122	(0.958)	215597	10.0000	10.131
107	Hexachlorobenzene	284	10.207	10.207	(0.966)	207521	10.0000	10.402
210	Atrazine	200	10.239	10.239	(0.969)	183824	10.0000	10.936
227	n-Octadecane	57	10.378	10.378	(1.654)	262529	10.0000	9.0302
111	Pentachlorophenol	266	10.378	10.378	(0.982)	205184	20.0000	17.063
115	Phenanthrene	178	10.592	10.592	(1.003)	877398	10.0000	9.7044
116	Anthracene	178	10.640	10.640	(1.007)	887963	10.0000	9.9104
119	Carbazole	167	10.784	10.784	(1.021)	739520	10.0000	9.5360
120	Di-n-Butylphthalate	149	11.078	11.078	(1.049)	869892	10.0000	9.8421
123	Fluoranthene	202	11.911	11.911	(1.127)	994725	10.0000	9.9067
124	Benzidine	184	12.040	12.040	(0.850)	213815	10.0000	8.3394

10.151 / 2 = 5.08

Value not reported on summary form.

Not a target.

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
125 Pyrene	202	12.216	12.216	(0.863)	970008	10.0000	9.9457
131 Butylbenzylphthalate	149	13.081	13.081	(0.924)	353230	10.0000	10.602
135 3,3'-Dichlorobenzidine	252	14.064	14.064	(0.993)	304991	10.0000	10.374
136 Benzo(a)Anthracene	228	14.144	14.144	(0.999)	852620	10.0000	9.6373
137 Chrysene	228	14.214	14.214	(1.004)	764578	10.0000	9.6539
139 bis(2-ethylhexyl)Phthalate	149	14.096	14.096	(0.995)	477672	10.0000	10.793
140 Di-n-octylphthalate	149	15.410	15.410	(0.900)	771385	10.0000	10.708
141 Benzo(b)fluoranthene	252	16.308	16.308	(0.953)	824632	10.0000	9.6544
142 Benzo(k)fluoranthene	252	16.372	16.372	(0.956)	797230	10.0000	9.3596
143 7,12-dimethylbenz[a]anthracen	256	16.297	16.297	(0.952)	340077	10.0000	9.3960
146 Benzo(a)pyrene	252	17.002	17.002	(0.993)	729837	10.0000	9.7003
149 Indeno(1,2,3-cd)pyrene	276	19.374	19.374	(1.132)	761511	10.0000	9.8303
150 Dibenz(a,h)anthracene	278	19.396	19.396	(1.133)	652088	10.0000	9.9896
151 Benzo(g,h,i)perylene	276	19.983	19.983	(1.167)	631136	10.0000	9.8073
$ 154 Nitrobenzene-d5	82	6.820	6.820	(0.907)	300804	10.0000	9.4332
$ 155 2-Fluorobiphenyl	172	8.530	8.530	(0.930)	731539	10.0000	9.8736
$ 156 Terphenyl-d14	244	12.376	12.376	(0.874)	729536	10.0000	10.032
$ 157 Phenol-d5	99	5.923	5.923	(0.944)	361982	10.0000	9.6837
$ 158 2-Fluorophenol	112	4.892	4.892	(0.780)	308106	10.0000	9.6842
$ 159 2,4,6-Tribromophenol	330	9.913	9.913	(0.938)	77585	10.0000	10.937

9.6373/2 = 4.82

10.793/2 = 5.40

value not reported on summary form.

QC Flag Legend

M - Compound response manually integrated.

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Sample No.: CCVIS 180-87196/8 Date Analyzed: 10/18/2013 11:31

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): N10180CC.D Heated Purge: (Y/N) N

Calibration ID: 11737

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		204457	6.28	712087	7.52	399548	9.18
UPPER LIMIT		408914	6.78	1424174	8.02	799096	9.68
LOWER LIMIT		102229	5.78	356044	7.02	199774	8.68
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-86943/1-A		176836	6.27	628155	7.50	375755	9.17
LCS 180-86943/2-A		168129	6.27	590019	7.52	336073	9.18
LCSD 180-86943/3-A		160783	6.27	573115	7.51	326938	9.17
180-26012-6	MB-MW-06-20131010	170375	6.28	579431	7.52	321668	9.18
180-26012-8	MB-MW-05-20131010	155883	6.27	509483	7.51	283259	9.17
180-26012-9	MB-EB-20131010	162354	6.27	584925	7.50	348428	9.16

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Sample No.: CCVIS 180-87196/8 Date Analyzed: 10/18/2013 11:31

Instrument ID: 733 GC Column: Rxi-5SilMS ID: 0.32(mm)

Lab File ID (Standard): N10180CC.D Heated Purge: (Y/N) N

Calibration ID: 11737

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		645528	10.57	614576	14.16	490762	17.12
UPPER LIMIT		1291056	11.07	1229152	14.66	981524	17.62
LOWER LIMIT		322764	10.07	307288	13.66	245381	16.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-86943/1-A		656775	10.55	635068	14.14	471081	17.10
LCS 180-86943/2-A		547088	10.57	532871	14.17	461156	17.12
LCSD 180-86943/3-A		520663	10.58	518974	14.15	456657	17.09
180-26012-6	MB-MW-06-20131010	511101	10.57	491105	14.16	413619	17.10
180-26012-8	MB-MW-05-20131010	425480	10.57	459367	14.15	424943	17.10
180-26012-9	MB-EB-20131010	586958	10.56	567591	14.14	443832	17.08

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1
SDG No.:
Client Sample ID: | Lab Sample ID: MB 180-86837/1-A
Matrix: Water | Lab File ID: N1017005.D
Analysis Method: 8270D | Date Collected:
Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07
Sample wt/vol: 1000(mL) | Date Analyzed: 10/17/2013 12:03
Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1
Injection Volume: 2(uL) | Level: (low/med) Low
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND		2.0	0.14
208-96-8	Acenaphthylene	ND		2.0	0.15
120-12-7	Anthracene	ND		2.0	0.15
56-55-3	Benzo[a]anthracene	ND		2.0	0.15
50-32-8	Benzo[a]pyrene	ND		2.0	0.13
205-99-2	Benzo[b]fluoranthene	ND		2.0	0.16
191-24-2	Benzo[g,h,i]perylene	ND		2.0	0.15
207-08-9	Benzo[k]fluoranthene	ND		2.0	0.55
117-81-7	Bis(2-ethylhexyl) phthalate	ND		20	13
108-60-1	2,2'-oxybis[1-chloropropane]	ND		2.0	0.20
101-55-3	4-Bromophenyl phenyl ether	ND		10	0.64
85-68-7	Butyl benzyl phthalate	ND		10	1.4
86-74-8	Carbazole	ND		2.0	0.16
106-47-8	4-Chloroaniline	ND		10	0.89
91-58-7	2-Chloronaphthalene	ND		2.0	0.15
7005-72-3	4-Chlorophenyl phenyl ether	ND		10	0.50
218-01-9	Chrysene	ND		2.0	0.14
53-70-3	Dibenz(a,h)anthracene	ND		2.0	0.16
132-64-9	Dibenzofuran	ND		10	0.62
84-74-2	Di-n-butyl phthalate	ND		10	1.2
91-94-1	3,3'-Dichlorobenzidine	ND		10	1.1
84-66-2	Diethyl phthalate	ND		10	1.5
131-11-3	Dimethyl phthalate	ND		10	0.77
121-14-2	2,4-Dinitrotoluene	ND		10	0.54
606-20-2	2,6-Dinitrotoluene	ND		10	0.80
117-84-0	Di-n-octyl phthalate	ND		10	2.1
206-44-0	Fluoranthene	ND		2.0	0.16
86-73-7	Fluorene	ND		2.0	0.22
118-74-1	Hexachlorobenzene	ND		2.0	0.18
87-68-3	Hexachlorobutadiene	ND		2.0	0.17
77-47-4	Hexachlorocyclopentadiene	ND		10	0.52
67-72-1	Hexachloroethane	ND		10	0.63
193-39-5	Indeno[1,2,3-cd]pyrene	ND		2.0	0.20
78-59-1	Isophorone	ND		10	0.64

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1
SDG No.:
Client Sample ID: | Lab Sample ID: MB 180-86837/1-A
Matrix: Water | Lab File ID: N1017005.D
Analysis Method: 8270D | Date Collected:
Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07
Sample wt/vol: 1000(mL) | Date Analyzed: 10/17/2013 12:03
Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1
Injection Volume: 2(uL) | Level: (low/med) Low
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
91-57-6	2-Methylnaphthalene	ND		2.0	0.12
91-20-3	Naphthalene	ND		2.0	0.14
88-74-4	2-Nitroaniline	ND		50	3.5
99-09-2	3-Nitroaniline	ND		50	3.2
100-01-6	4-Nitroaniline	ND		50	1.7
100-02-7	4-Nitrophenol	ND		50	6.5
98-95-3	Nitrobenzene	ND		20	0.84
621-64-7	N-Nitrosodi-n-propylamine	ND		2.0	0.31
86-30-6	N-Nitrosodiphenylamine	ND		10	0.85
85-01-8	Phenanthrene	ND		2.0	0.43
129-00-0	Pyrene	ND		2.0	0.16
59-50-7	4-Chloro-3-methylphenol	ND		10	0.75
95-57-8	2-Chlorophenol	ND		10	1.7
95-48-7	2-Methylphenol	ND		10	0.86
106-44-5	Methylphenol, 3 & 4	ND		10	0.90
120-83-2	2,4-Dichlorophenol	ND		2.0	0.33
105-67-9	2,4-Dimethylphenol	ND		10	0.85
51-28-5	2,4-Dinitrophenol	ND		50	6.1
534-52-1	4,6-Dinitro-2-methylphenol	ND		50	2.2
88-75-5	2-Nitrophenol	ND		10	1.7
87-86-5	Pentachlorophenol	ND		10	0.66
108-95-2	Phenol	ND		2.0	0.58
95-95-4	2,4,5-Trichlorophenol	ND		10	1.5
88-06-2	2,4,6-Trichlorophenol	ND		10	1.7
98-86-2	Acetophenone	ND		10	0.80
1912-24-9	Atrazine	ND		10	0.89
100-52-7	Benzaldehyde	ND		10	1.5
92-52-4	1,1'-Biphenyl	ND		10	0.42
105-60-2	Caprolactam	ND		50	12
111-91-1	Bis(2-chloroethoxy)methane	ND		10	0.58
111-44-4	Bis(2-chloroethyl)ether	ND		2.0	0.25

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-86837/1-A

Matrix: Water | Lab File ID: N1017005.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1000(mL) | Date Analyzed: 10/17/2013 12:03

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	69		37-104
4165-62-2	Phenol-d5 (Surr)	66		30-102
321-60-8	2-Fluorobiphenyl	69		35-108
118-79-6	2,4,6-Tribromophenol (Surr)	70		33-122
367-12-4	2-Fluorophenol (Surr)	67		26-100
1718-51-0	Terphenyl-d14 (Surr)	87		25-130

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-86943/1-A

Matrix: Water | Lab File ID: N1018002.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/17/2013 06:31

Sample wt/vol: 1000(mL) | Date Analyzed: 10/18/2013 11:57

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87196 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND		2.0	0.14
208-96-8	Acenaphthylene	ND		2.0	0.15
120-12-7	Anthracene	ND		2.0	0.15
56-55-3	Benzo[a]anthracene	ND		2.0	0.15
50-32-8	Benzo[a]pyrene	ND		2.0	0.13
205-99-2	Benzo[b]fluoranthene	ND		2.0	0.16
191-24-2	Benzo[g,h,i]perylene	ND		2.0	0.15
207-08-9	Benzo[k]fluoranthene	ND		2.0	0.55
117-81-7	Bis(2-ethylhexyl) phthalate	ND		20	13
108-60-1	2,2'-oxybis[1-chloropropane]	ND		2.0	0.20
101-55-3	4-Bromophenyl phenyl ether	ND		10	0.64
85-68-7	Butyl benzyl phthalate	ND		10	1.4
86-74-8	Carbazole	ND		2.0	0.16
106-47-8	4-Chloroaniline	ND		10	0.89
91-58-7	2-Chloronaphthalene	ND		2.0	0.15
7005-72-3	4-Chlorophenyl phenyl ether	ND		10	0.50
218-01-9	Chrysene	ND		2.0	0.14
53-70-3	Dibenz(a,h)anthracene	ND		2.0	0.16
132-64-9	Dibenzofuran	ND		10	0.62
84-74-2	Di-n-butyl phthalate	ND		10	1.2
91-94-1	3,3'-Dichlorobenzidine	ND		10	1.1
84-66-2	Diethyl phthalate	ND		10	1.5
131-11-3	Dimethyl phthalate	ND		10	0.77
121-14-2	2,4-Dinitrotoluene	ND		10	0.54
606-20-2	2,6-Dinitrotoluene	ND		10	0.80
117-84-0	Di-n-octyl phthalate	ND		10	2.1
206-44-0	Fluoranthene	ND		2.0	0.16
86-73-7	Fluorene	ND		2.0	0.22
118-74-1	Hexachlorobenzene	ND		2.0	0.18
87-68-3	Hexachlorobutadiene	ND		2.0	0.17
77-47-4	Hexachlorocyclopentadiene	ND		10	0.52
67-72-1	Hexachloroethane	ND		10	0.63
193-39-5	Indeno[1,2,3-cd]pyrene	ND		2.0	0.20
78-59-1	Isophorone	ND		10	0.64

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-86943/1-A

Matrix: Water | Lab File ID: N1018002.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/17/2013 06:31

Sample wt/vol: 1000(mL) | Date Analyzed: 10/18/2013 11:57

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87196 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
91-57-6	2-Methylnaphthalene	ND		2.0	0.12
91-20-3	Naphthalene	ND		2.0	0.14
88-74-4	2-Nitroaniline	ND		50	3.5
99-09-2	3-Nitroaniline	ND		50	3.2
100-01-6	4-Nitroaniline	ND		50	1.7
100-02-7	4-Nitrophenol	ND		50	6.5
98-95-3	Nitrobenzene	ND		20	0.84
621-64-7	N-Nitrosodi-n-propylamine	ND		2.0	0.31
86-30-6	N-Nitrosodiphenylamine	ND		10	0.85
85-01-8	Phenanthrene	ND		2.0	0.43
129-00-0	Pyrene	ND		2.0	0.16
59-50-7	4-Chloro-3-methylphenol	ND		10	0.75
95-57-8	2-Chlorophenol	ND		10	1.7
95-48-7	2-Methylphenol	ND		10	0.86
106-44-5	Methylphenol, 3 & 4	ND		10	0.90
120-83-2	2,4-Dichlorophenol	ND		2.0	0.33
105-67-9	2,4-Dimethylphenol	ND		10	0.85
51-28-5	2,4-Dinitrophenol	ND		50	6.1
534-52-1	4,6-Dinitro-2-methylphenol	ND		50	2.2
88-75-5	2-Nitrophenol	ND		10	1.7
87-86-5	Pentachlorophenol	ND		10	0.66
108-95-2	Phenol	ND		2.0	0.58
95-95-4	2,4,5-Trichlorophenol	ND		10	1.5
88-06-2	2,4,6-Trichlorophenol	ND		10	1.7
98-86-2	Acetophenone	ND		10	0.80
1912-24-9	Atrazine	ND		10	0.89
100-52-7	Benzaldehyde	ND		10	1.5
92-52-4	1,1'-Biphenyl	ND		10	0.42
105-60-2	Caprolactam	ND		50	12
111-91-1	Bis(2-chloroethoxy)methane	ND		10	0.58
111-44-4	Bis(2-chloroethyl)ether	ND		2.0	0.25

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name:	TestAmerica Pittsburgh	Job No.:	180-26012-1
SDG No.:			
Client Sample ID:		Lab Sample ID:	MB 180-86943/1-A
Matrix:	Water	Lab File ID:	N1018002.D
Analysis Method:	8270D	Date Collected:	
Extract. Method:	3520C	Date Extracted:	10/17/2013 06:31
Sample wt/vol:	1000(mL)	Date Analyzed:	10/18/2013 11:57
Con. Extract Vol.:	10.0(mL)	Dilution Factor:	1
Injection Volume:	2(uL)	Level: (low/med)	Low
% Moisture:		GPC Cleanup:(Y/N)	N
Analysis Batch No.:	87196	Units:	ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	59		37-104
4165-62-2	Phenol-d5 (Surr)	60		30-102
321-60-8	2-Fluorobiphenyl	63		35-108
118-79-6	2,4,6-Tribromophenol (Surr)	69		33-122
367-12-4	2-Fluorophenol (Surr)	61		26-100
1718-51-0	Terphenyl-d14 (Surr)	81		25-130

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-86837/2-A

Matrix: Water | Lab File ID: N1017006.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1000(mL) | Date Analyzed: 10/17/2013 13:20

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	138		2.0	0.14
208-96-8	Acenaphthylene	136		2.0	0.15
120-12-7	Anthracene	137		2.0	0.15
56-55-3	Benzo[a]anthracene	136		2.0	0.15
50-32-8	Benzo[a]pyrene	136		2.0	0.13
205-99-2	Benzo[b]fluoranthene	130		2.0	0.16
191-24-2	Benzo[g,h,i]perylene	150		2.0	0.15
207-08-9	Benzo[k]fluoranthene	135		2.0	0.55
117-81-7	Bis(2-ethylhexyl) phthalate	152		20	13
108-60-1	2,2'-oxybis[1-chloropropane]	101		2.0	0.20
101-55-3	4-Bromophenyl phenyl ether	144		10	0.64
85-68-7	Butyl benzyl phthalate	150		10	1.4
86-74-8	Carbazole	131		2.0	0.16
106-47-8	4-Chloroaniline	118		10	0.89
91-58-7	2-Chloronaphthalene	125		2.0	0.15
7005-72-3	4-Chlorophenyl phenyl ether	140		10	0.50
218-01-9	Chrysene	145		2.0	0.14
53-70-3	Dibenz(a,h)anthracene	150		2.0	0.16
132-64-9	Dibenzofuran	136		10	0.62
84-74-2	Di-n-butyl phthalate	145		10	1.2
91-94-1	3,3'-Dichlorobenzidine	150		10	1.1
84-66-2	Diethyl phthalate	145		10	1.5
131-11-3	Dimethyl phthalate	140		10	0.77
121-14-2	2,4-Dinitrotoluene	142		10	0.54
606-20-2	2,6-Dinitrotoluene	145		10	0.80
117-84-0	Di-n-octyl phthalate	139		10	2.1
206-44-0	Fluoranthene	142		2.0	0.16
86-73-7	Fluorene	138		2.0	0.22
118-74-1	Hexachlorobenzene	143		2.0	0.18
87-68-3	Hexachlorobutadiene	133		2.0	0.17
77-47-4	Hexachlorocyclopentadiene	139		10	0.52
67-72-1	Hexachloroethane	121		10	0.63
193-39-5	Indeno[1,2,3-cd]pyrene	142		2.0	0.20
78-59-1	Isophorone	132		10	0.64

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-86837/2-A

Matrix: Water | Lab File ID: N1017006.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1000(mL) | Date Analyzed: 10/17/2013 13:20

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
91-57-6	2-Methylnaphthalene	127		2.0	0.12
91-20-3	Naphthalene	125		2.0	0.14
88-74-4	2-Nitroaniline	142		50	3.5
99-09-2	3-Nitroaniline	136		50	3.2
100-01-6	4-Nitroaniline	135		50	1.7
100-02-7	4-Nitrophenol	299		50	6.5
98-95-3	Nitrobenzene	123		20	0.84
621-64-7	N-Nitrosodi-n-propylamine	126		2.0	0.31
86-30-6	N-Nitrosodiphenylamine	140		10	0.85
85-01-8	Phenanthrene	135		2.0	0.43
129-00-0	Pyrene	141		2.0	0.16
59-50-7	4-Chloro-3-methylphenol	134		10	0.75
95-57-8	2-Chlorophenol	127		10	1.7
95-48-7	2-Methylphenol	128		10	0.86
106-44-5	Methylphenol, 3 & 4	128		10	0.90
120-83-2	2,4-Dichlorophenol	133		2.0	0.33
105-67-9	2,4-Dimethylphenol	140		10	0.85
51-28-5	2,4-Dinitrophenol	266		50	6.1
534-52-1	4,6-Dinitro-2-methylphenol	290		50	2.2
88-75-5	2-Nitrophenol	134		10	1.7
87-86-5	Pentachlorophenol	271		10	0.66
108-95-2	Phenol	120		2.0	0.58
95-95-4	2,4,5-Trichlorophenol	140		10	1.5
88-06-2	2,4,6-Trichlorophenol	143		10	1.7
98-86-2	Acetophenone	113		10	0.80
1912-24-9	Atrazine	126		10	0.89
100-52-7	Benzaldehyde	183		10	1.5
92-52-4	1,1'-Biphenyl	132		10	0.42
105-60-2	Caprolactam	138		50	12
111-91-1	Bis(2-chloroethoxy)methane	120		10	0.58
111-44-4	Bis(2-chloroethyl)ether	120		2.0	0.25

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-86837/2-A

Matrix: Water | Lab File ID: N1017006.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1000(mL) | Date Analyzed: 10/17/2013 13:20

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	60		37-104
4165-62-2	Phenol-d5 (Surr)	62		30-102
321-60-8	2-Fluorobiphenyl	66		35-108
118-79-6	2,4,6-Tribromophenol (Surr)	73		33-122
367-12-4	2-Fluorophenol (Surr)	63		26-100
1718-51-0	Terphenyl-d14 (Surr)	84		25-130

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-86943/2-A

Matrix: Water | Lab File ID: N1018003.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/17/2013 06:31

Sample wt/vol: 1000(mL) | Date Analyzed: 10/18/2013 12:48

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87196 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	127		2.0	0.14
208-96-8	Acenaphthylene	125		2.0	0.15
120-12-7	Anthracene	123		2.0	0.15
56-55-3	Benzo[a]anthracene	128		2.0	0.15
50-32-8	Benzo[a]pyrene	123		2.0	0.13
205-99-2	Benzo[b]fluoranthene	123		2.0	0.16
191-24-2	Benzo[g,h,i]perylene	133		2.0	0.15
207-08-9	Benzo[k]fluoranthene	118		2.0	0.55
117-81-7	Bis(2-ethylhexyl) phthalate	141		20	13
108-60-1	2,2'-oxybis[1-chloropropane]	95.2		2.0	0.20
101-55-3	4-Bromophenyl phenyl ether	130		10	0.64
85-68-7	Butyl benzyl phthalate	142		10	1.4
86-74-8	Carbazole	122		2.0	0.16
106-47-8	4-Chloroaniline	111		10	0.89
91-58-7	2-Chloronaphthalene	110		2.0	0.15
7005-72-3	4-Chlorophenyl phenyl ether	131		10	0.50
218-01-9	Chrysene	135		2.0	0.14
53-70-3	Dibenz(a,h)anthracene	135		2.0	0.16
132-64-9	Dibenzofuran	127		10	0.62
84-74-2	Di-n-butyl phthalate	129		10	1.2
91-94-1	3,3'-Dichlorobenzidine	126		10	1.1
84-66-2	Diethyl phthalate	131		10	1.5
131-11-3	Dimethyl phthalate	127		10	0.77
121-14-2	2,4-Dinitrotoluene	131		10	0.54
606-20-2	2,6-Dinitrotoluene	129		10	0.80
117-84-0	Di-n-octyl phthalate	132		10	2.1
206-44-0	Fluoranthene	130		2.0	0.16
86-73-7	Fluorene	128		2.0	0.22
118-74-1	Hexachlorobenzene	132		2.0	0.18
87-68-3	Hexachlorobutadiene	124		2.0	0.17
77-47-4	Hexachlorocyclopentadiene	130		10	0.52
67-72-1	Hexachloroethane	118		10	0.63
193-39-5	Indeno[1,2,3-cd]pyrene	127		2.0	0.20
78-59-1	Isophorone	122		10	0.64

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-86943/2-A

Matrix: Water | Lab File ID: N1018003.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/17/2013 06:31

Sample wt/vol: 1000(mL) | Date Analyzed: 10/18/2013 12:48

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87196 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
91-57-6	2-Methylnaphthalene	119		2.0	0.12
91-20-3	Naphthalene	118		2.0	0.14
88-74-4	2-Nitroaniline	126		50	3.5
99-09-2	3-Nitroaniline	124		50	3.2
100-01-6	4-Nitroaniline	124		50	1.7
100-02-7	4-Nitrophenol	266		50	6.5
98-95-3	Nitrobenzene	112		20	0.84
621-64-7	N-Nitrosodi-n-propylamine	117		2.0	0.31
86-30-6	N-Nitrosodiphenylamine	127		10	0.85
85-01-8	Phenanthrene	128		2.0	0.43
129-00-0	Pyrene	131		2.0	0.16
59-50-7	4-Chloro-3-methylphenol	125		10	0.75
95-57-8	2-Chlorophenol	122		10	1.7
95-48-7	2-Methylphenol	123		10	0.86
106-44-5	Methylphenol, 3 & 4	121		10	0.90
120-83-2	2,4-Dichlorophenol	126		2.0	0.33
105-67-9	2,4-Dimethylphenol	130		10	0.85
51-28-5	2,4-Dinitrophenol	240		50	6.1
534-52-1	4,6-Dinitro-2-methylphenol	244		50	2.2
88-75-5	2-Nitrophenol	127		10	1.7
87-86-5	Pentachlorophenol	222		10	0.66
108-95-2	Phenol	119		2.0	0.58
95-95-4	2,4,5-Trichlorophenol	129		10	1.5
88-06-2	2,4,6-Trichlorophenol	135		10	1.7
98-86-2	Acetophenone	113		10	0.80
1912-24-9	Atrazine	128		10	0.89
100-52-7	Benzaldehyde	110		10	1.5
92-52-4	1,1'-Biphenyl	123		10	0.42
105-60-2	Caprolactam	133		50	12
111-91-1	Bis(2-chloroethoxy)methane	112		10	0.58
111-44-4	Bis(2-chloroethyl)ether	116		2.0	0.25

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-86943/2-A

Matrix: Water | Lab File ID: N1018003.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/17/2013 06:31

Sample wt/vol: 1000(mL) | Date Analyzed: 10/18/2013 12:48

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87196 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	58		37-104
4165-62-2	Phenol-d5 (Surr)	59		30-102
321-60-8	2-Fluorobiphenyl	61		35-108
118-79-6	2,4,6-Tribromophenol (Surr)	70		33-122
367-12-4	2-Fluorophenol (Surr)	62		26-100
1718-51-0	Terphenyl-d14 (Surr)	78		25-130

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 180-86943/3-A

Matrix: Water | Lab File ID: N1018004.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/17/2013 06:31

Sample wt/vol: 1000(mL) | Date Analyzed: 10/18/2013 13:14

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87196 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	133		2.0	0.14
208-96-8	Acenaphthylene	133		2.0	0.15
120-12-7	Anthracene	133		2.0	0.15
56-55-3	Benzo[a]anthracene	135		2.0	0.15
50-32-8	Benzo[a]pyrene	127		2.0	0.13
205-99-2	Benzo[b]fluoranthene	122		2.0	0.16
191-24-2	Benzo[g,h,i]perylene	137		2.0	0.15
207-08-9	Benzo[k]fluoranthene	122		2.0	0.55
117-81-7	Bis(2-ethylhexyl) phthalate	150		20	13
108-60-1	2,2'-oxybis[1-chloropropane]	99.4		2.0	0.20
101-55-3	4-Bromophenyl phenyl ether	143		10	0.64
85-68-7	Butyl benzyl phthalate	150		10	1.4
86-74-8	Carbazole	130		2.0	0.16
106-47-8	4-Chloroaniline	116		10	0.89
91-58-7	2-Chloronaphthalene	119		2.0	0.15
7005-72-3	4-Chlorophenyl phenyl ether	138		10	0.50
218-01-9	Chrysene	140		2.0	0.14
53-70-3	Dibenz(a,h)anthracene	139		2.0	0.16
132-64-9	Dibenzofuran	133		10	0.62
84-74-2	Di-n-butyl phthalate	138		10	1.2
91-94-1	3,3'-Dichlorobenzidine	131		10	1.1
84-66-2	Diethyl phthalate	138		10	1.5
131-11-3	Dimethyl phthalate	137		10	0.77
121-14-2	2,4-Dinitrotoluene	138		10	0.54
606-20-2	2,6-Dinitrotoluene	139		10	0.80
117-84-0	Di-n-octyl phthalate	136		10	2.1
206-44-0	Fluoranthene	139		2.0	0.16
86-73-7	Fluorene	135		2.0	0.22
118-74-1	Hexachlorobenzene	142		2.0	0.18
87-68-3	Hexachlorobutadiene	131		2.0	0.17
77-47-4	Hexachlorocyclopentadiene	137		10	0.52
67-72-1	Hexachloroethane	124		10	0.63
193-39-5	Indeno[1,2,3-cd]pyrene	132		2.0	0.20
78-59-1	Isophorone	131		10	0.64

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 180-86943/3-A

Matrix: Water | Lab File ID: N1018004.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/17/2013 06:31

Sample wt/vol: 1000(mL) | Date Analyzed: 10/18/2013 13:14

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87196 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
91-57-6	2-Methylnaphthalene	125		2.0	0.12
91-20-3	Naphthalene	123		2.0	0.14
88-74-4	2-Nitroaniline	131		50	3.5
99-09-2	3-Nitroaniline	129		50	3.2
100-01-6	4-Nitroaniline	125		50	1.7
100-02-7	4-Nitrophenol	280		50	6.5
98-95-3	Nitrobenzene	116		20	0.84
621-64-7	N-Nitrosodi-n-propylamine	126		2.0	0.31
86-30-6	N-Nitrosodiphenylamine	136		10	0.85
85-01-8	Phenanthrene	136		2.0	0.43
129-00-0	Pyrene	135		2.0	0.16
59-50-7	4-Chloro-3-methylphenol	133		10	0.75
95-57-8	2-Chlorophenol	128		10	1.7
95-48-7	2-Methylphenol	131		10	0.86
106-44-5	Methylphenol, 3 & 4	128		10	0.90
120-83-2	2,4-Dichlorophenol	133		2.0	0.33
105-67-9	2,4-Dimethylphenol	137		10	0.85
51-28-5	2,4-Dinitrophenol	254		50	6.1
534-52-1	4,6-Dinitro-2-methylphenol	266		50	2.2
88-75-5	2-Nitrophenol	131		10	1.7
87-86-5	Pentachlorophenol	232		10	0.66
108-95-2	Phenol	124		2.0	0.58
95-95-4	2,4,5-Trichlorophenol	132		10	1.5
88-06-2	2,4,6-Trichlorophenol	141		10	1.7
98-86-2	Acetophenone	118		10	0.80
1912-24-9	Atrazine	134		10	0.89
100-52-7	Benzaldehyde	114		10	1.5
92-52-4	1,1'-Biphenyl	130		10	0.42
105-60-2	Caprolactam	141		50	12
111-91-1	Bis(2-chloroethoxy)methane	118		10	0.58
111-44-4	Bis(2-chloroethyl)ether	123		2.0	0.25

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 180-86943/3-A

Matrix: Water | Lab File ID: N1018004.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 10/17/2013 06:31

Sample wt/vol: 1000(mL) | Date Analyzed: 10/18/2013 13:14

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87196 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	60		37-104
4165-62-2	Phenol-d5 (Surr)	63		30-102
321-60-8	2-Fluorobiphenyl	64		35-108
118-79-6	2,4,6-Tribromophenol (Surr)	76		33-122
367-12-4	2-Fluorophenol (Surr)	65		26-100
1718-51-0	Terphenyl-d14 (Surr)	79		25-130

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-02-20131009 MS | Lab Sample ID: 180-26012-1 MS

Matrix: Water | Lab File ID: N1017008.D

Analysis Method: 8270D | Date Collected: 10/09/2013 11:15

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1030(mL) | Date Analyzed: 10/17/2013 15:04

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	114		1.9	0.14
208-96-8	Acenaphthylene	111		1.9	0.15
120-12-7	Anthracene	113		1.9	0.15
56-55-3	Benzo[a]anthracene	115		1.9	0.14
50-32-8	Benzo[a]pyrene	83.0		1.9	0.13
205-99-2	Benzo[b]fluoranthene	80.0		1.9	0.15
191-24-2	Benzo[g,h,i]perylene	106		1.9	0.15
207-08-9	Benzo[k]fluoranthene	76.9		1.9	0.53
117-81-7	Bis(2-ethylhexyl) phthalate	124		19	12
108-60-1	2,2'-oxybis[1-chloropropane]	80.8		1.9	0.19
101-55-3	4-Bromophenyl phenyl ether	112		9.7	0.62
85-68-7	Butyl benzyl phthalate	112		9.7	1.4
86-74-8	Carbazole	134		1.9	0.15
106-47-8	4-Chloroaniline	82.7		9.7	0.86
91-58-7	2-Chloronaphthalene	99.6		1.9	0.15
7005-72-3	4-Chlorophenyl phenyl ether	119		9.7	0.49
218-01-9	Chrysene	130		1.9	0.14
53-70-3	Dibenz(a,h)anthracene	108		1.9	0.15
132-64-9	Dibenzofuran	114		9.7	0.60
84-74-2	Di-n-butyl phthalate	119		9.7	1.2
91-94-1	3,3'-Dichlorobenzidine	8.82	J	9.7	1.1
84-66-2	Diethyl phthalate	131		9.7	1.4
131-11-3	Dimethyl phthalate	125		9.7	0.74
121-14-2	2,4-Dinitrotoluene	137		9.7	0.52
606-20-2	2,6-Dinitrotoluene	130		9.7	0.77
117-84-0	Di-n-octyl phthalate	81.9		9.7	2.0
206-44-0	Fluoranthene	125		1.9	0.16
86-73-7	Fluorene	116		1.9	0.21
118-74-1	Hexachlorobenzene	117		1.9	0.18
87-68-3	Hexachlorobutadiene	101		1.9	0.16
77-47-4	Hexachlorocyclopentadiene	71.8		9.7	0.50
67-72-1	Hexachloroethane	90.6		9.7	0.61
193-39-5	Indeno[1,2,3-cd]pyrene	102		1.9	0.19
78-59-1	Isophorone	114		9.7	0.63

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-02-20131009 MS | Lab Sample ID: 180-26012-1 MS

Matrix: Water | Lab File ID: N1017008.D

Analysis Method: 8270D | Date Collected: 10/09/2013 11:15

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1030(mL) | Date Analyzed: 10/17/2013 15:04

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
91-57-6	2-Methylnaphthalene	106		1.9	0.12
91-20-3	Naphthalene	104		1.9	0.14
88-74-4	2-Nitroaniline	125		49	3.4
99-09-2	3-Nitroaniline	111		49	3.1
100-01-6	4-Nitroaniline	126		49	1.7
100-02-7	4-Nitrophenol	296		49	6.3
98-95-3	Nitrobenzene	105		19	0.82
621-64-7	N-Nitrosodi-n-propylamine	105		1.9	0.30
86-30-6	N-Nitrosodiphenylamine	121		9.7	0.83
85-01-8	Phenanthrene	112		1.9	0.41
129-00-0	Pyrene	97.0		1.9	0.15
59-50-7	4-Chloro-3-methylphenol	120		9.7	0.73
95-57-8	2-Chlorophenol	104		9.7	1.6
95-48-7	2-Methylphenol	103		9.7	0.84
106-44-5	Methylphenol, 3 & 4	107		9.7	0.88
120-83-2	2,4-Dichlorophenol	112		1.9	0.32
105-67-9	2,4-Dimethylphenol	254		9.7	0.83
51-28-5	2,4-Dinitrophenol	274		49	6.0
534-52-1	4,6-Dinitro-2-methylphenol	282		49	2.1
88-75-5	2-Nitrophenol	113		9.7	1.7
87-86-5	Pentachlorophenol	303		9.7	0.64
108-95-2	Phenol	90.1		1.9	0.56
95-95-4	2,4,5-Trichlorophenol	122		9.7	1.5
88-06-2	2,4,6-Trichlorophenol	121		9.7	1.7
98-86-2	Acetophenone	99.6		9.7	0.78
1912-24-9	Atrazine	77.3		9.7	0.87
100-52-7	Benzaldehyde	99.9		9.7	1.5
92-52-4	1,1'-Biphenyl	108		9.7	0.40
105-60-2	Caprolactam	142		49	12
111-91-1	Bis(2-chloroethoxy)methane	102		9.7	0.56
111-44-4	Bis(2-chloroethyl)ether	101		1.9	0.24

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-02-20131009 MS | Lab Sample ID: 180-26012-1 MS

Matrix: Water | Lab File ID: N1017008.D

Analysis Method: 8270D | Date Collected: 10/09/2013 11:15

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1030(mL) | Date Analyzed: 10/17/2013 15:04

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	53		37-104
4165-62-2	Phenol-d5 (Surr)	48		30-102
321-60-8	2-Fluorobiphenyl	47		35-108
118-79-6	2,4,6-Tribromophenol (Surr)	64		33-122
367-12-4	2-Fluorophenol (Surr)	49		26-100
1718-51-0	Terphenyl-d14 (Surr)	30		25-130

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-02-20131009 MSD | Lab Sample ID: 180-26012-1 MSD

Matrix: Water | Lab File ID: N1017009.D

Analysis Method: 8270D | Date Collected: 10/09/2013 11:15

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1050(mL) | Date Analyzed: 10/17/2013 15:31

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	114		1.9	0.14
208-96-8	Acenaphthylene	109		1.9	0.14
120-12-7	Anthracene	109		1.9	0.15
56-55-3	Benzo[a]anthracene	114		1.9	0.14
50-32-8	Benzo[a]pyrene	81.4		1.9	0.13
205-99-2	Benzo[b]fluoranthene	77.3		1.9	0.15
191-24-2	Benzo[g,h,i]perylene	105		1.9	0.14
207-08-9	Benzo[k]fluoranthene	75.9		1.9	0.52
117-81-7	Bis(2-ethylhexyl) phthalate	122		19	12
108-60-1	2,2'-oxybis[1-chloropropane]	81.3		1.9	0.19
101-55-3	4-Bromophenyl phenyl ether	112		9.5	0.60
85-68-7	Butyl benzyl phthalate	112		9.5	1.4
86-74-8	Carbazole	131		1.9	0.15
106-47-8	4-Chloroaniline	78.7		9.5	0.84
91-58-7	2-Chloronaphthalene	99.1		1.9	0.14
7005-72-3	4-Chlorophenyl phenyl ether	113		9.5	0.48
218-01-9	Chrysene	127		1.9	0.13
53-70-3	Dibenz(a,h)anthracene	106		1.9	0.15
132-64-9	Dibenzofuran	114		9.5	0.59
84-74-2	Di-n-butyl phthalate	124		9.5	1.2
91-94-1	3,3'-Dichlorobenzidine	8.17	J	9.5	1.1
84-66-2	Diethyl phthalate	126		9.5	1.4
131-11-3	Dimethyl phthalate	122		9.5	0.73
121-14-2	2,4-Dinitrotoluene	134		9.5	0.51
606-20-2	2,6-Dinitrotoluene	129		9.5	0.76
117-84-0	Di-n-octyl phthalate	80.5		9.5	2.0
206-44-0	Fluoranthene	123		1.9	0.15
86-73-7	Fluorene	117		1.9	0.21
118-74-1	Hexachlorobenzene	117		1.9	0.17
87-68-3	Hexachlorobutadiene	98.1		1.9	0.16
77-47-4	Hexachlorocyclopentadiene	73.6		9.5	0.49
67-72-1	Hexachloroethane	89.0		9.5	0.60
193-39-5	Indeno[1,2,3-cd]pyrene	99.7		1.9	0.19
78-59-1	Isophorone	111		9.5	0.61

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-02-20131009 MSD | Lab Sample ID: 180-26012-1 MSD

Matrix: Water | Lab File ID: N1017009.D

Analysis Method: 8270D | Date Collected: 10/09/2013 11:15

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1050(mL) | Date Analyzed: 10/17/2013 15:31

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
91-57-6	2-Methylnaphthalene	105		1.9	0.12
91-20-3	Naphthalene	105		1.9	0.13
88-74-4	2-Nitroaniline	124		48	3.3
99-09-2	3-Nitroaniline	76.1		48	3.1
100-01-6	4-Nitroaniline	115		48	1.6
100-02-7	4-Nitrophenol	268		48	6.2
98-95-3	Nitrobenzene	107		19	0.80
621-64-7	N-Nitrosodi-n-propylamine	101		1.9	0.29
86-30-6	N-Nitrosodiphenylamine	120		9.5	0.81
85-01-8	Phenanthrene	110		1.9	0.41
129-00-0	Pyrene	101		1.9	0.15
59-50-7	4-Chloro-3-methylphenol	120		9.5	0.72
95-57-8	2-Chlorophenol	99.3		9.5	1.6
95-48-7	2-Methylphenol	103		9.5	0.82
106-44-5	Methylphenol, 3 & 4	99.6		9.5	0.86
120-83-2	2,4-Dichlorophenol	111		1.9	0.32
105-67-9	2,4-Dimethylphenol	257		9.5	0.81
51-28-5	2,4-Dinitrophenol	260		48	5.8
534-52-1	4,6-Dinitro-2-methylphenol	277		48	2.1
88-75-5	2-Nitrophenol	114		9.5	1.6
87-86-5	Pentachlorophenol	286		9.5	0.63
108-95-2	Phenol	86.3		1.9	0.55
95-95-4	2,4,5-Trichlorophenol	121		9.5	1.5
88-06-2	2,4,6-Trichlorophenol	119		9.5	1.7
98-86-2	Acetophenone	94.3		9.5	0.76
1912-24-9	Atrazine	77.3		9.5	0.85
100-52-7	Benzaldehyde	98.7		9.5	1.4
92-52-4	1,1'-Biphenyl	108		9.5	0.40
105-60-2	Caprolactam	138		48	11
111-91-1	Bis(2-chloroethoxy)methane	103		9.5	0.55
111-44-4	Bis(2-chloroethyl)ether	97.5		1.9	0.24

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-02-20131009 MSD | Lab Sample ID: 180-26012-1 MSD

Matrix: Water | Lab File ID: N1017009.D

Analysis Method: 8270D | Date Collected: 10/09/2013 11:15

Extract. Method: 3520C | Date Extracted: 10/16/2013 09:07

Sample wt/vol: 1050(mL) | Date Analyzed: 10/17/2013 15:31

Con. Extract Vol.: 10.0(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87081 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
4165-60-0	Nitrobenzene-d5 (Surr)	55		37-104
4165-62-2	Phenol-d5 (Surr)	47		30-102
321-60-8	2-Fluorobiphenyl	48		35-108
118-79-6	2,4,6-Tribromophenol (Surr)	64		33-122
367-12-4	2-Fluorophenol (Surr)	48		26-100
1718-51-0	Terphenyl-d14 (Surr)	30		25-130

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: 733 Start Date: 10/09/2013 05:09

Analysis Batch Number: 86218 End Date: 10/09/2013 09:13

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-86218/1		10/09/2013 05:09	1	N1009DF1.D	Rxi-5SilMS 0.32(mm)
IC 180-86218/2		10/09/2013 05:24	1	N1009IC1.D	Rxi-5SilMS 0.32(mm)
IC 180-86218/3		10/09/2013 05:49	1	N1009IC2.D	Rxi-5SilMS 0.32(mm)
IC 180-86218/4		10/09/2013 06:15	1	N1009IC3.D	Rxi-5SilMS 0.32(mm)
ICIS 180-86218/5		10/09/2013 06:40	1	N1009IC4.D	Rxi-5SilMS 0.32(mm)
IC 180-86218/6		10/09/2013 07:06	1	N1009IC5.D	Rxi-5SilMS 0.32(mm)
IC 180-86218/7		10/09/2013 07:31	1	N1009IC6.D	Rxi-5SilMS 0.32(mm)
IC 180-86218/8		10/09/2013 07:56	1	N1009IC7.D	Rxi-5SilMS 0.32(mm)
IC 180-86218/9		10/09/2013 08:22	1	N1009IC8.D	Rxi-5SilMS 0.32(mm)
ICV 180-86218/10		10/09/2013 08:47	1	N1009SV1.D	Rxi-5SilMS 0.32(mm)
ICV 180-86218/11		10/09/2013 09:13	1	N1009SV2.D	Rxi-5SilMS 0.32(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: 733 Start Date: 10/17/2013 10:57

Analysis Batch Number: 87081 End Date: 10/17/2013 22:01

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-87081/26		10/17/2013 10:57	1	N1017DF1.D	Rxi-5Sil MS 0.32(mm)
CCVIS 180-87081/25		10/17/2013 11:11	1	N10170CC.D	Rxi-5Sil MS 0.32(mm)
ZZZZZ		10/17/2013 11:37	1		Rxi-5Sil MS 0.32(mm)
MB 180-86837/1-A		10/17/2013 12:03	1	N1017005.D	Rxi-5Sil MS 0.32(mm)
ZZZZZ		10/17/2013 12:28	1		Rxi-5Sil MS 0.32(mm)
ZZZZZ		10/17/2013 12:54	1		Rxi-5Sil MS 0.32(mm)
LCS 180-86837/2-A		10/17/2013 13:20	1	N1017006.D	Rxi-5Sil MS 0.32(mm)
ZZZZZ		10/17/2013 13:46	1		Rxi-5Sil MS 0.32(mm)
180-26012-1	MB-MW-02-20131009	10/17/2013 14:12	1	N1017007.D	Rxi-5Sil MS 0.32(mm)
180-26012-1 MS	MB-MW-02-20131009 MS	10/17/2013 15:04	1	N1017008.D	Rxi-5Sil MS 0.32(mm)
180-26012-1 MSD	MB-MW-02-20131009 MSD	10/17/2013 15:31	1	N1017009.D	Rxi-5Sil MS 0.32(mm)
180-26012-2	MB-MW-01-20131009	10/17/2013 15:57	1	N1017010.D	Rxi-5Sil MS 0.32(mm)
180-26012-3	MB-MW-03-20131009	10/17/2013 16:23	1	N1017011.D	Rxi-5Sil MS 0.32(mm)
180-26012-4	MB-EB-20131009	10/17/2013 16:49	1	N1017012.D	Rxi-5Sil MS 0.32(mm)
180-26012-5	MB-MW-04-20131009	10/17/2013 17:15	1	N1017013.D	Rxi-5Sil MS 0.32(mm)
180-26012-7	DUP-20131009	10/17/2013 17:41	1	N1017014.D	Rxi-5Sil MS 0.32(mm)
ZZZZZ		10/17/2013 18:07	1		Rxi-5Sil MS 0.32(mm)
ZZZZZ		10/17/2013 18:33	1		Rxi-5Sil MS 0.32(mm)
ZZZZZ		10/17/2013 18:58	1		Rxi-5Sil MS 0.32(mm)
ZZZZZ		10/17/2013 19:24	1		Rxi-5Sil MS 0.32(mm)
ZZZZZ		10/17/2013 19:50	1		Rxi-5Sil MS 0.32(mm)
ZZZZZ		10/17/2013 20:16	1		Rxi-5Sil MS 0.32(mm)
ZZZZZ		10/17/2013 20:42	1		Rxi-5Sil MS 0.32(mm)
ZZZZZ		10/17/2013 21:08	1		Rxi-5Sil MS 0.32(mm)
ZZZZZ		10/17/2013 21:34	1		Rxi-5Sil MS 0.32(mm)
ZZZZZ		10/17/2013 22:01	1		Rxi-5Sil MS 0.32(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: 733 Start Date: 10/18/2013 11:16

Analysis Batch Number: 87196 End Date: 10/18/2013 15:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 180-87196/9		10/18/2013 11:16	1	N1018DF1.D	Rxi-5Sil MS 0.32(mm)
CCVIS 180-87196/8		10/18/2013 11:31	1	N10180CC.D	Rxi-5Sil MS 0.32(mm)
MB 180-86943/1-A		10/18/2013 11:57	1	N1018002.D	Rxi-5Sil MS 0.32(mm)
LCS 180-86943/2-A		10/18/2013 12:48	1	N1018003.D	Rxi-5Sil MS 0.32(mm)
LCSD 180-86943/3-A		10/18/2013 13:14	1	N1018004.D	Rxi-5Sil MS 0.32(mm)
ZZZZZ		10/18/2013 14:06	5		Rxi-5Sil MS 0.32(mm)
180-26012-6	MB-MW-06-20131010	10/18/2013 14:32	1	N1018005.D	Rxi-5Sil MS 0.32(mm)
180-26012-8	MB-MW-05-20131010	10/18/2013 14:58	1	N1018006.D	Rxi-5Sil MS 0.32(mm)
180-26012-9	MB-EB-20131010	10/18/2013 15:24	1	N1018007.D	Rxi-5Sil MS 0.32(mm)

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Batch Number: 86837 Batch Start Date: 10/16/13 11:15 Batch Analyst: Trout, Bill

Batch Method: 3520C Batch End Date: 10/17/13 05:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	FirstAdjustpH	OPLVISPKMIX1i 00017	OPQL8270SURi 00009
MB 180-86837/1		3520C, 8270D		5	1000 mL	10.0 mL	2		1 mL
LCS 180-86837/2		3520C, 8270D		5	1000 mL	10.0 mL	2	1 mL	1 mL
180-26012-B-1 MS	MB-MW-02-20131009	3520C, 8270D	T	7	1030 mL	10.0 mL	2	1 mL	1 mL
180-26012-B-1 MSD	MB-MW-02-20131009	3520C, 8270D	T	7	1050 mL	10.0 mL	2	1 mL	1 mL
180-26012-A-1	MB-MW-02-20131009	3520C, 8270D	T	7	1030 mL	10.0 mL	2		1 mL
180-26012-A-2	MB-MW-01-20131009	3520C, 8270D	T	7	1040 mL	10.0 mL	2		1 mL
180-26012-C-3	MB-MW-03-20131009	3520C, 8270D	T	7	1040 mL	10.0 mL	2		1 mL
180-26012-A-4	MB-EB-20131009	3520C, 8270D	T	6	1050 mL	10.0 mL	2		1 mL
180-26012-B-5	MB-MW-04-20131009	3520C, 8270D	T	7	1040 mL	10.0 mL	2		1 mL
180-26012-B-7	DUP-20131009	3520C, 8270D	T	7	1040 mL	10.0 mL	2		1 mL

Batch Notes	
Acid used for pH adjustment	1:1 Sulfuric acid
Acid used for pH adjust Lot #	895533
Person's name who did the concentration	cdm
N-evap #	1
Na2SO4 Lot Number	965232
pH Paper Lot Number	Ph paper HC270245
Prep Solvent Lot #	984624
Prep Solvent Name	Methylene chloride
Prep Solvent Volume Used	250 mL
Person's name who did the prep	BT
Sufficient volume for MS/MSD?	Yes
Uncorrected N-evap Temperature	26 Celsius
Uncorrected Temperature	75 Celsius

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Batch Number: 86837 Batch Start Date: 10/16/13 11:15 Batch Analyst: Trout, Bill

Batch Method: 3520C Batch End Date: 10/17/13 05:30

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Batch Number: 86943 Batch Start Date: 10/17/13 11:05 Batch Analyst: Trout, Bill

Batch Method: 3520C Batch End Date: 10/18/13 05:20

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	FirstAdjustpH	OPLVISPKMIX1i 00017	OPQL8270SURi 00009
MB 180-86943/1		3520C, 8270D		5	1000 mL	10.0 mL	2		1 mL
LCS 180-86943/2		3520C, 8270D		5	1000 mL	10.0 mL	2	1 mL	1 mL
LCSD 180-86943/3		3520C, 8270D		5	1000 mL	10.0 mL	2	1 mL	1 mL
180-26012-B-6	MB-MW-06-20131010	3520C, 8270D	T	7	1030 mL	10.0 mL	2		1 mL
180-26012-D-8	MB-MW-05-20131010	3520C, 8270D	T	7	1040 mL	10.0 mL	2		1 mL
180-26012-C-9	MB-EB-20131010	3520C, 8270D	T	5	1040 mL	10.0 mL	2		1 mL

Batch Notes	
Acid used for pH adjustment	1:1 Sulfuric acid
Acid used for pH adjust Lot #	895533
Person's name who did the concentration	bp/cdm
N-evap #	1
Na2SO4 Lot Number	965232
pH Paper Lot Number	Ph paper HC270245
Prep Solvent Lot #	984624
Prep Solvent Name	Methylene chloride
Prep Solvent Volume Used	250 mL
Person's name who did the prep	bt
Uncorrected N-evap Temperature	26 Celsius
Uncorrected Temperature	75 Celsius

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

FORM II
GC SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low

GC Column (2): RTX-1701 ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	TCX2 #	DCB2 #
MB-MW-02-20131009	180-26012-1	140	74
MB-MW-01-20131009	180-26012-2	139	91
MB-MW-03-20131009	180-26012-3	121	83
MB-EB-20131009	180-26012-4	114	87
MB-MW-04-20131009	180-26012-5	143	95
MB-MW-06-20131010	180-26012-6	72	47 X
DUP-20131009	180-26012-7	133	85
MB-MW-05-20131010	180-26012-8	153 X	90
MB-EB-20131010	180-26012-9	124	86
	MB 180-86783/1-C	110	86
	LCS 180-86783/2-C	115	89
MB-MW-02-20131009 MS	180-26012-1 MS	128	77
MB-MW-02-20131009 MSD	180-26012-1 MSD	141	86

low flag L/LL

high flag K - no impact on ND, → no positives.

	QC LIMITS
TCX = Tetrachloro-m-xylene	47-150
DCB = DCB Decachlorobiphenyl (Surr)	50-140

Column to be used to flag recovery values

FORM II 8082A

FORM III
GC SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P1030658.D

Lab ID: 180-26012-1 MS Client ID: MB-MW-02-20131009 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
PCB-1016	0.990	ND	1.02	103	60-110	
PCB-1260	0.990	ND	1.02	103	60-111	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM III
GC SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P1030659.D

Lab ID: 180-26012-1 MSD Client ID: MB-MW-02-20131009 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC.	% RPD	QC LIMITS RPD	QC LIMITS REC	#
PCB-1016	0.990	1.13	114	9	27	60-110	F
PCB-1260	0.990	1.12	113	9	24	60-111	F

High flag (+) K.
no positives (J)
no impact.

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-02-20131009 MS | Lab Sample ID: 180-26012-1 MS

Matrix: Water | Lab File ID: P1030658.D

Analysis Method: 8082A | Date Collected: 10/09/2013 11:15

Extraction Method: 3510C | Date Extracted: 10/15/2013 14:50

Sample wt/vol: 1010(mL) | Date Analyzed: 10/19/2013 23:54

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-1701 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	1.02		0.0099	0.0025
11104-28-2	PCB-1221	ND		0.0099	0.0025
11141-16-5	PCB-1232	ND		0.0099	0.0029
53469-21-9	PCB-1242	ND		0.0099	0.0018
12672-29-6	PCB-1248	ND		0.0099	0.0023
11097-69-1	PCB-1254	ND		0.0099	0.0023
11096-82-5	PCB-1260	1.02		0.0099	0.0013
37324-23-5	PCB-1262	ND		0.0099	0.0020
11100-14-4	PCB-1268	ND		0.0099	0.0027

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	77		50-140
877-09-8	Tetrachloro-m-xylene	128		47-150

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-02-20131009 MSD | Lab Sample ID: 180-26012-1 MSD

Matrix: Water | Lab File ID: P1030659.D

Analysis Method: 8082A | Date Collected: 10/09/2013 11:15

Extraction Method: 3510C | Date Extracted: 10/15/2013 14:50

Sample wt/vol: 1010(mL) | Date Analyzed: 10/20/2013 00:23

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-1701 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	1.13		0.0099	0.0025
11104-28-2	PCB-1221	ND		0.0099	0.0025
11141-16-5	PCB-1232	ND		0.0099	0.0029
53469-21-9	PCB-1242	ND		0.0099	0.0018
12672-29-6	PCB-1248	ND		0.0099	0.0023
11097-69-1	PCB-1254	ND		0.0099	0.0023
11096-82-5	PCB-1260	1.12		0.0099	0.0013
37324-23-5	PCB-1262	ND		0.0099	0.0020
11100-14-4	PCB-1268	ND		0.0099	0.0027

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	86		50-140
877-09-8	Tetrachloro-m-xylene	141		47-150

FORM III
GC SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P1030669.D

Lab ID: LCS 180-86783/2-C Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
PCB-1016	1.00	1.14	114	60-110	*
PCB-1260	1.00	1.14	114	60-111	*

High
Flag (+) LC
no impact on (ND's)

positives in MB-MW-06-20131016 of
MB-MW-04-20131004
for TPH

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-86783/2-C

Matrix: Water | Lab File ID: P1030669.D

Analysis Method: 8082A | Date Collected:

Extraction Method: 3510C | Date Extracted: 10/15/2013 14:50

Sample wt/vol: 1000(mL) | Date Analyzed: 10/20/2013 05:15

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-1701 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	1.14		0.010	0.0025
11104-28-2	PCB-1221	ND		0.010	0.0025
11141-16-5	PCB-1232	ND		0.010	0.0029
53469-21-9	PCB-1242	ND		0.010	0.0019
12672-29-6	PCB-1248	ND		0.010	0.0023
11097-69-1	PCB-1254	ND		0.010	0.0023
11096-82-5	PCB-1260	1.14		0.010	0.0014
37324-23-5	PCB-1262	ND		0.010	0.0021
11100-14-4	PCB-1268	ND		0.010	0.0027

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	89		50-140
877-09-8	Tetrachloro-m-xylene	115		47-150

FORM IV
GC SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: MB 180-86783/1-C

Matrix: Water Date Extracted: 10/15/2013 14:50

Lab File ID:(1) Lab File ID:(2) P1030668.D

Date Analyzed:(1) Date Analyzed:(2) 10/20/2013 04:46

Instrument ID:(1) Instrument ID:(2) GC8

GC Column:(1) ID: GC Column:(2) RTX-1701 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
MB-MW-02-20131009	180-26012-1		10/19/2013 23:25
MB-MW-02-20131009 MS	180-26012-1 MS		10/19/2013 23:54
MB-MW-02-20131009 MSD	180-26012-1 MSD		10/20/2013 00:23
MB-MW-03-20131009	180-26012-3		10/20/2013 01:22
MB-EB-20131009	180-26012-4		10/20/2013 01:51
DUP-20131009	180-26012-7		10/20/2013 03:19
MB-MW-05-20131010	180-26012-8		10/20/2013 03:48
MB-EB-20131010	180-26012-9		10/20/2013 04:17
	LCS 180-86783/2-C		10/20/2013 05:15
MB-MW-01-20131009	180-26012-2		10/21/2013 10:24
MB-MW-04-20131009	180-26012-5		10/21/2013 10:54
MB-MW-06-20131010	180-26012-6		10/21/2013 11:23

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-86783/1-C

Matrix: Water | Lab File ID: P1030668.D

Analysis Method: 8082A | Date Collected:

Extraction Method: 3510C | Date Extracted: 10/15/2013 14:50

Sample wt/vol: 1000(mL) | Date Analyzed: 10/20/2013 04:46

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-1701 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	ND		0.010	0.0025
11104-28-2	PCB-1221	ND		0.010	0.0025
11141-16-5	PCB-1232	ND		0.010	0.0029
53469-21-9	PCB-1242	ND		0.010	0.0019
12672-29-6	PCB-1248	ND		0.010	0.0023
11097-69-1	PCB-1254	ND		0.010	0.0023
11096-82-5	PCB-1260	ND		0.010	0.0014
37324-23-5	PCB-1262	ND		0.010	0.0021
11100-14-4	PCB-1268	ND		0.010	0.0027

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	86		50-140
877-09-8	Tetrachloro-m-xylene	110		47-150

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 15:33 Calibration End Date: 10/14/2013 17:30 Calibration ID: 11835

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/1	P1030400.D
Level 2	IC 180-86759/2	P1030401.D
Level 3	IC 180-86759/3	P1030402.D
Level 4	IC 180-86759/4	P1030403.D
Level 5	IC 180-86759/5	P1030404.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	RT WINDOW	AVG RT
PCB-1221 Peak 1	5.892	5.889	5.882	5.879	5.876	5.820 - 5.920	5.883
PCB-1221 Peak 2	6.745	6.738	6.728	6.721	6.717	6.661 - 6.761	6.730
PCB-1221 Peak 3	7.004	6.982	6.970	6.964	6.958	6.902 - 7.002	6.975
PCB-1254 Peak 1	9.708	9.708	9.704	9.703	9.700	9.650 - 9.750	9.704
PCB-1254 Peak 2	10.075	10.074	10.069	10.066	10.063	10.013 - 10.113	10.069
PCB-1254 Peak 3	10.633	10.630	10.625	10.624	10.619	10.569 - 10.669	10.626
PCB-1254 Peak 4	11.414	11.414	11.411	11.410	11.408	11.358 - 11.458	11.411
PCB-1254 Peak 5	11.971	11.967	11.964	11.960	11.955	11.905 - 12.005	11.964

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 15:33 Calibration End Date: 10/14/2013 17:30 Calibration ID: 11835

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/1	P1030400.D
Level 2	IC 180-86759/2	P1030401.D
Level 3	IC 180-86759/3	P1030402.D
Level 4	IC 180-86759/4	P1030403.D
Level 5	IC 180-86759/5	P1030404.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
PCB-1221 Peak 1	168000 250791	211120	224940	247080	Ave		220386.200				15.2		20.0			
PCB-1221 Peak 2	337600 321570	239850	264156	297106	Ave		292056.400				13.8		20.0			
PCB-1221 Peak 3	371200 654285	524400	567760	619706	Ave		547470.200				20.1	*	20.0			
PCB-1254 Peak 1	1321300 1344359	1385090	1375736	1349914	Ave		1355279.80				1.9		20.0			
PCB-1254 Peak 2	1180900 1240457	1227610	1202884	1211186	Ave		1212607.40				1.9		20.0			
PCB-1254 Peak 3	418700 442640	452530	429868	436810	Ave		436109.600				2.9		20.0			
PCB-1254 Peak 4	801500 694163	775760	703440	713150	Ave		737602.600				6.5		20.0			
PCB-1254 Peak 5	720900 654041	680790	627736	662118	Ave		669117.000				5.2		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 15:33 Calibration End Date: 10/14/2013 17:30 Calibration ID: 11835

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/1	P1030400.D
Level 2	IC 180-86759/2	P1030401.D
Level 3	IC 180-86759/3	P1030402.D
Level 4	IC 180-86759/4	P1030403.D
Level 5	IC 180-86759/5	P1030404.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1221 Peak 1	Ave	1680	21112	56235	123540	250791	0.0100	0.100	0.250	0.500	1.00
PCB-1221 Peak 2	Ave	3376	23985	66039	148553	321570	0.0100	0.100	0.250	0.500	1.00
PCB-1221 Peak 3	Ave	3712	52440	141940	309853	654285	0.0100	0.100	0.250	0.500	1.00
PCB-1254 Peak 1	Ave	13213	138509	343934	674957	1344359	0.0100	0.100	0.250	0.500	1.00
PCB-1254 Peak 2	Ave	11809	122761	300721	605593	1240457	0.0100	0.100	0.250	0.500	1.00
PCB-1254 Peak 3	Ave	4187	45253	107467	218405	442640	0.0100	0.100	0.250	0.500	1.00
PCB-1254 Peak 4	Ave	8015	77576	175860	356575	694163	0.0100	0.100	0.250	0.500	1.00
PCB-1254 Peak 5	Ave	7209	68079	156934	331059	654041	0.0100	0.100	0.250	0.500	1.00

Curve Type Legend:
Ave = Average by Height

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 17:59 Calibration End Date: 10/14/2013 19:56 Calibration ID: 11836

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/6	P1030405.D
Level 2	IC 180-86759/7	P1030406.D
Level 3	IC 180-86759/8	P1030407.D
Level 4	IC 180-86759/9	P1030408.D
Level 5	IC 180-86759/10	P1030409.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	RT WINDOW	AVG RT
PCB-1242 Peak 1	7.760	7.756	7.753	7.748	7.745	7.695 - 7.795	7.752
PCB-1242 Peak 2	8.442	8.440	8.431	8.423	8.413	8.363 - 8.463	8.430
PCB-1242 Peak 3	9.168	9.168	9.162	9.158	9.154	9.104 - 9.204	9.162
PCB-1242 Peak 4	9.576	9.564	9.555	9.544	9.535	9.485 - 9.585	9.555
PCB-1242 Peak 5	10.221	10.219	10.204	10.192	10.179	10.129 - 10.229	10.203

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 17:59 Calibration End Date: 10/14/2013 19:56 Calibration ID: 11836

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/6	P1030405.D
Level 2	IC 180-86759/7	P1030406.D
Level 3	IC 180-86759/8	P1030407.D
Level 4	IC 180-86759/9	P1030408.D
Level 5	IC 180-86759/10	P1030409.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
PCB-1242 Peak 1	449100 524877	427260	403608	432458	Ave		447460.600				10.3		20.0			
PCB-1242 Peak 2	412800 578009	464460	483556	467820	Ave		481329.000				12.5		20.0			
PCB-1242 Peak 3	506100 664379	535220	536216	514012	Ave		551185.400				11.7		20.0			
PCB-1242 Peak 4	210600 325284	191960	208068	218036	Ave		230789.600				23.3	*	20.0			
PCB-1242 Peak 5	400900 520147	398210	403052	394688	Ave		423399.400				12.8		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 17:59 Calibration End Date: 10/14/2013 19:56 Calibration ID: 11836

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/6	P1030405.D
Level 2	IC 180-86759/7	P1030406.D
Level 3	IC 180-86759/8	P1030407.D
Level 4	IC 180-86759/9	P1030408.D
Level 5	IC 180-86759/10	P1030409.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1242 Peak 1	Ave	4491	42726	100902	216229	524877	0.0100	0.100	0.250	0.500	1.00
PCB-1242 Peak 2	Ave	4128	46446	120889	233910	578009	0.0100	0.100	0.250	0.500	1.00
PCB-1242 Peak 3	Ave	5061	53522	134054	257006	664379	0.0100	0.100	0.250	0.500	1.00
PCB-1242 Peak 4	Ave	2106	19196	52017	109018	325284	0.0100	0.100	0.250	0.500	1.00
PCB-1242 Peak 5	Ave	4009	39821	100763	197344	520147	0.0100	0.100	0.250	0.500	1.00

Curve Type Legend:

Ave = Average by Height

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 20:25 Calibration End Date: 10/14/2013 22:22 Calibration ID: 11837

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/11	P1030410.D
Level 2	IC 180-86759/12	P1030411.D
Level 3	IC 180-86759/13	P1030412.D
Level 4	IC 180-86759/14	P1030413.D
Level 5	IC 180-86759/15	P1030414.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	RT WINDOW	AVG RT
PCB-1248 Peak 1	8.102	8.103	8.091	8.079	8.067	8.017 - 8.117	8.088
PCB-1248 Peak 2	8.987	8.980	8.974	8.970	8.968	8.918 - 9.018	8.976
PCB-1248 Peak 3	9.178	9.167	9.161	9.158	9.154	9.104 - 9.204	9.164
PCB-1248 Peak 4	10.234	10.221	10.205	10.190	10.178	10.184 - 10.284	10.206
PCB-1248 Peak 5	11.052	11.042	11.037	11.034	11.031	10.981 - 11.081	11.039

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 20:25 Calibration End Date: 10/14/2013 22:22 Calibration ID: 11837

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/11	P1030410.D
Level 2	IC 180-86759/12	P1030411.D
Level 3	IC 180-86759/13	P1030412.D
Level 4	IC 180-86759/14	P1030413.D
Level 5	IC 180-86759/15	P1030414.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
PCB-1248 Peak 1	489300 701680	543640	579108	611460	Ave		585037.600				13.6		20.0			
PCB-1248 Peak 2	1002600 1136938	1045510	1081304	1063062	Ave		1065882.80				4.6		20.0			
PCB-1248 Peak 3	840800 984218	872930	899892	894842	Ave		898536.400				5.9		20.0			
PCB-1248 Peak 4	745700 765597	714370	697980	693776	Ave		723484.600				4.3		20.0			
PCB-1248 Peak 5	516000 518083	495360	498480	499734	Ave		505531.400				2.1		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 20:25 Calibration End Date: 10/14/2013 22:22 Calibration ID: 11837

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/11	P1030410.D
Level 2	IC 180-86759/12	P1030411.D
Level 3	IC 180-86759/13	P1030412.D
Level 4	IC 180-86759/14	P1030413.D
Level 5	IC 180-86759/15	P1030414.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1248 Peak 1	Ave	4893	54364	144777	305730	701680	0.0100	0.100	0.250	0.500	1.00
PCB-1248 Peak 2	Ave	10026	104551	270326	531531	1136938	0.0100	0.100	0.250	0.500	1.00
PCB-1248 Peak 3	Ave	8408	87293	224973	447421	984218	0.0100	0.100	0.250	0.500	1.00
PCB-1248 Peak 4	Ave	7457	71437	174495	346888	765597	0.0100	0.100	0.250	0.500	1.00
PCB-1248 Peak 5	Ave	5160	49536	124620	249867	518083	0.0100	0.100	0.250	0.500	1.00

Curve Type Legend:
Ave = Average by Height

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 22:52 Calibration End Date: 10/14/2013 22:52 Calibration ID: 11838

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/16	P1030415.D

ANALYTE	LVL 1	RT WINDOW	AVG RT
PCB-1232 Peak 1	6.727	6.677 - 6.777	6.727
PCB-1232 Peak 2	6.895	6.845 - 6.945	6.895
PCB-1232 Peak 3	8.217	8.167 - 8.267	8.217
PCB-1232 Peak 4	8.548	8.498 - 8.598	8.548
PCB-1232 Peak 5	9.702	9.652 - 9.752	9.702

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 22:52 Calibration End Date: 10/14/2013 22:52 Calibration ID: 11838

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/16	P1030415.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1232 Peak 1	158486				Ave		158486.000						20.0			
PCB-1232 Peak 2	117102				Ave		117102.000						20.0			
PCB-1232 Peak 3	120258				Ave		120258.000						20.0			
PCB-1232 Peak 4	314476				Ave		314476.000						20.0			
PCB-1232 Peak 5	273866				Ave		273866.000						20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 22:52 Calibration End Date: 10/14/2013 22:52 Calibration ID: 11838

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/16	P1030415.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1					LVL 1				
PCB-1232 Peak 1	Ave	79243					0.500				
PCB-1232 Peak 2	Ave	58551					0.500				
PCB-1232 Peak 3	Ave	60129					0.500				
PCB-1232 Peak 4	Ave	157238					0.500				
PCB-1232 Peak 5	Ave	136933					0.500				

Curve Type Legend:
Ave = Average by Height

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 23:21 Calibration End Date: 10/14/2013 23:21 Calibration ID: 11839

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/17	P1030416.D

ANALYTE	LVL 1	RT WINDOW	AVG RT
PCB-1262 Peak 1	11.411	11.361 - 11.461	11.411
PCB-1262 Peak 2	11.958	11.908 - 12.008	11.958
PCB-1262 Peak 3	13.042	12.992 - 13.092	13.042
PCB-1262 Peak 4	14.014	13.964 - 14.064	14.014
PCB-1262 Peak 5	17.234	17.184 - 17.284	17.234

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 23:21 Calibration End Date: 10/14/2013 23:21 Calibration ID: 11839

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/17	P1030416.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1262 Peak 1	1054564				Ave		1054564.00						20.0			
PCB-1262 Peak 2	1112308				Ave		1112308.00						20.0			
PCB-1262 Peak 3	1573854				Ave		1573854.00						20.0			
PCB-1262 Peak 4	523574				Ave		523574.000						20.0			
PCB-1262 Peak 5	1070404				Ave		1070404.00						20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 23:21 Calibration End Date: 10/14/2013 23:21 Calibration ID: 11839

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/17	P1030416.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1					LVL 1				
PCB-1262 Peak 1	Ave	527282					0.500				
PCB-1262 Peak 2	Ave	556154					0.500				
PCB-1262 Peak 3	Ave	786927					0.500				
PCB-1262 Peak 4	Ave	261787					0.500				
PCB-1262 Peak 5	Ave	535202					0.500				

Curve Type Legend:
Ave = Average by Height

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 23:50 Calibration End Date: 10/14/2013 23:50 Calibration ID: 11840

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/18	P1030417.D

ANALYTE	LVL 1	RT WINDOW	AVG RT
PCB-1268 Peak 1	15.679	15.629 - 15.729	15.679
PCB-1268 Peak 2	15.831	15.781 - 15.881	15.831
PCB-1268 Peak 3	16.330	16.280 - 16.380	16.331
PCB-1268 Peak 4	17.870	17.820 - 17.920	17.870

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 23:50 Calibration End Date: 10/14/2013 23:50 Calibration ID: 11840

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/18	P1030417.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1					B	M1	M2								
PCB-1268 Peak 1	3023882				Ave		3023882.00						20.0			
PCB-1268 Peak 2	2846994				Ave		2846994.00						20.0			
PCB-1268 Peak 3	2785048				Ave		2785048.00						20.0			
PCB-1268 Peak 4	8652636				Ave		8652636.00						20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/14/2013 23:50 Calibration End Date: 10/14/2013 23:50 Calibration ID: 11840

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/18	P1030417.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1					LVL 1				
PCB-1268 Peak 1	Ave	1511941					0.500				
PCB-1268 Peak 2	Ave	1423497					0.500				
PCB-1268 Peak 3	Ave	1392524					0.500				
PCB-1268 Peak 4	Ave	4326318					0.500				

Curve Type Legend:
Ave = Average by Height

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2013 00:19 Calibration End Date: 10/15/2013 03:14 Calibration ID: 11841

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/19	P1030418.D
Level 2	IC 180-86759/20	P1030419.D
Level 3	IC 180-86759/21	P1030420.D
Level 4	ICRT 180-86759/22	P1030421.D
Level 5	IC 180-86759/23	P1030422.D
Level 6	IC 180-86759/24	P1030423.D
Level 7	IC 180-86759/25	P1030424.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	RT WINDOW	AVG RT
PCB-1016 Peak 1	7.432	7.430	7.426	7.428	7.424	7.422	7.418	7.382 - 7.482	7.426
PCB-1016 Peak 2	8.093	8.085	8.068	8.068	8.057	8.047	8.040	8.043 - 8.143	8.065
PCB-1016 Peak 3	8.434	8.432	8.423	8.422	8.415	8.404	8.396	8.346 - 8.446	8.418
PCB-1016 Peak 4	8.977	8.977	8.971	8.971	8.968	8.965	8.960	8.910 - 9.010	8.970
PCB-1016 Peak 5	9.699	9.701	9.699	9.696	9.696	9.693	9.687	9.637 - 9.737	9.696
PCB-1260 Peak 1	11.414	11.412	11.409	11.407	11.405	11.405	11.399	11.349 - 11.449	11.407
PCB-1260 Peak 2	11.964	11.962	11.957	11.951	11.951	11.949	11.942	11.892 - 11.992	11.954
PCB-1260 Peak 3	12.845	12.842	12.835	12.829	12.830	12.828	12.818	12.768 - 12.868	12.832
PCB-1260 Peak 4	13.855	13.855	13.852	13.850	13.848	13.848	13.842	13.792 - 13.892	13.850
PCB-1260 Peak 5	14.687	14.682	14.677	14.672	14.672	14.669	14.664	14.614 - 14.714	14.675
Tetrachloro-m-xylene	6.403	6.401	6.397	6.399	6.395	6.393	6.389	6.339 - 6.439	6.397
DCB Decachlorobiphenyl (Surr)	18.253	18.252	18.252	18.247	18.250	18.250	18.247	18.197 - 18.297	18.250

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2013 00:19 Calibration End Date: 10/15/2013 03:14 Calibration ID: 11841

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/19	P1030418.D
Level 2	IC 180-86759/20	P1030419.D
Level 3	IC 180-86759/21	P1030420.D
Level 4	ICRT 180-86759/22	P1030421.D
Level 5	IC 180-86759/23	P1030422.D
Level 6	IC 180-86759/24	P1030423.D
Level 7	IC 180-86759/25	P1030424.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1016 Peak 1	1439200 1316378	1444180 1374438	1500310 1343179	1252524	Ave		1381458.32				6.2		20.0			
PCB-1016 Peak 2	1478400 1699203	1457680 1998811	1641550 2144349	1435726	Ave		1693674.18				16.5		20.0			
PCB-1016 Peak 3	779600 630649	706920 648405	720260 701305	617584	Ave		686388.964				8.4		20.0			
PCB-1016 Peak 4	923400 809529	886520 865048	902215 868529	767452	Ave		860384.714				6.3		20.0			
PCB-1016 Peak 5	752600 671259	751860 672744	754280 589933	526746	Ave		674203.143				13.2		20.0			
PCB-1260 Peak 1	1617400 1356783	1512220 1406231	1546935 1398905	1311826	Ave		1450042.75				7.6		20.0			
PCB-1260 Peak 2	1643600 1498848	1604460 1569175	1662075 1595178	1428312	Ave		1571663.93				5.2		20.0			
PCB-1260 Peak 3	1536300 1515010	1559260 1611068	1644210 1663360	1431730	Ave		1565848.25				5.2		20.0			
PCB-1260 Peak 4	1083400 1022499	1061800 1060134	1128840 1065605	992234	Ave		1059215.93				4.1		20.0			
PCB-1260 Peak 5	2269300 2216144	2197240 2360513	2362175 2392570	2075724	Ave		2267666.43				5.0		20.0			
Tetrachloro-m-xylene	42158000 45804260	41525200 52346450	47175700 55946325	40202160	Ave		46451156.4				12.7		20.0			
DCB Decachlorobiphenyl (Surr)	23716000 20474440	23046400 21624730	23571300 21719585	20017480	Ave		22024276.4				6.7		20.0			

Note: The ml coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1 Analy Batch No.: 86759

SDG No.:

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2013 00:19 Calibration End Date: 10/15/2013 03:14 Calibration ID: 11841

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-86759/19	P1030418.D
Level 2	IC 180-86759/20	P1030419.D
Level 3	IC 180-86759/21	P1030420.D
Level 4	ICRT 180-86759/22	P1030421.D
Level 5	IC 180-86759/23	P1030422.D
Level 6	IC 180-86759/24	P1030423.D
Level 7	IC 180-86759/25	P1030424.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1016 Peak 1	Ave	14392 2748875	72209 5372715	300062	626262	1316378	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1016 Peak 2	Ave	14784 3997622	72884 8577397	328310	717863	1699203	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1016 Peak 3	Ave	7796 1296809	35346 2805221	144052	308792	630649	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1016 Peak 4	Ave	9234 1730096	44326 3474116	180443	383726	809529	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1016 Peak 5	Ave	7526 1345488	37593 2359732	150856	263373	671259	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1260 Peak 1	Ave	16174 2812461	75611 5595619	309387	655913	1356783	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1260 Peak 2	Ave	16436 3138349	80223 6380712	332415	714156	1498848	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1260 Peak 3	Ave	15363 3222135	77963 6653441	328842	715865	1515010	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1260 Peak 4	Ave	10834 2120268	53090 4262418	225768	496117	1022499	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
PCB-1260 Peak 5	Ave	22693 4721025	109862 9570278	472435	1037862	2216144	0.0100 2.00	0.0500 4.00	0.200	0.500	1.00
Tetrachloro-m-xylene	Ave	21079 5234645	103813 11189265	471757	1005054	2290213	0.000500 0.100	0.00250 0.200	0.0100	0.0250	0.0500
DCB Decachlorobiphenyl (Surr)	Ave	11858 2162473	57616 4343917	235713	500437	1023722	0.000500 0.100	0.00250 0.200	0.0100	0.0250	0.0500

Curve Type Legend:
Ave = Average by Height

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/26 Calibration Date: 10/15/2013 03:43

Instrument ID: GC8 Calib Start Date: 10/14/2013 15:33

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/14/2013 17:30

Lab File ID: P1030425.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1221 Peak 1	Ave	220386	266874		0.605	0.500	21.1*	20.0
PCB-1221 Peak 2	Ave	292056	312948		0.536	0.500	7.2	20.0
PCB-1221 Peak 3	Ave	547470	651156		0.595	0.500	18.9	20.0
PCB-1254 Peak 1	Ave	1355280	1579018		0.583	0.500	16.5	20.0
PCB-1254 Peak 2	Ave	1212607	1405658		0.580	0.500	15.9	20.0
PCB-1254 Peak 3	Ave	436110	519832		0.596	0.500	19.2	20.0
PCB-1254 Peak 4	Ave	737603	805546		0.546	0.500	9.2	20.0
PCB-1254 Peak 5	Ave	669117	741508		0.554	0.500	10.8	20.0

Aroclor - 1221 ave <20% ok

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/26 Calibration Date: 10/15/2013 03:43

Instrument ID: GC8 Calib Start Date: 10/14/2013 15:33

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/14/2013 17:30

Lab File ID: P1030425.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1221 Peak 1	5.87	5.82	5.92
PCB-1221 Peak 2	6.71	6.66	6.76
PCB-1221 Peak 3	6.95	6.90	7.00
PCB-1254 Peak 1	9.69	9.65	9.75
PCB-1254 Peak 2	10.05	10.01	10.11
PCB-1254 Peak 3	10.61	10.57	10.67
PCB-1254 Peak 4	11.40	11.36	11.46
PCB-1254 Peak 5	11.95	11.91	12.01

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/27 Calibration Date: 10/15/2013 04:13

Instrument ID: GC8 Calib Start Date: 10/14/2013 22:52

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/14/2013 22:52

Lab File ID: P1030426.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1232 Peak 1	Ave	158486	175950		0.555	0.500	11.0	20.0
PCB-1232 Peak 2	Ave	117102	129044		0.551	0.500	10.2	20.0
PCB-1232 Peak 3	Ave	120258	116924		0.486	0.500	-2.8	20.0
PCB-1232 Peak 4	Ave	314476	320312		0.509	0.500	1.9	20.0
PCB-1232 Peak 5	Ave	273866	300808		0.549	0.500	9.8	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/27 Calibration Date: 10/15/2013 04:13

Instrument ID: GC8 Calib Start Date: 10/14/2013 22:52

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/14/2013 22:52

Lab File ID: P1030426.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1232 Peak 1	6.72	6.68	6.78
PCB-1232 Peak 2	6.89	6.85	6.95
PCB-1232 Peak 3	8.21	8.17	8.27
PCB-1232 Peak 4	8.54	8.50	8.60
PCB-1232 Peak 5	9.69	9.65	9.75

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/29 Calibration Date: 10/15/2013 05:11

Instrument ID: GC8 Calib Start Date: 10/14/2013 20:25

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/14/2013 22:22

Lab File ID: P1030428.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1248 Peak 1	Ave	585038	550196		0.470	0.500	-6.0	20.0
PCB-1248 Peak 2	Ave	1065883	978404		0.459	0.500	-8.2	20.0
PCB-1248 Peak 3	Ave	898536	842066		0.469	0.500	-6.3	20.0
PCB-1248 Peak 4	Ave	723485	668614		0.462	0.500	-7.6	20.0
PCB-1248 Peak 5	Ave	505531	487726		0.482	0.500	-3.5	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/29 Calibration Date: 10/15/2013 05:11

Instrument ID: GC8 Calib Start Date: 10/14/2013 20:25

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/14/2013 22:22

Lab File ID: P1030428.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1248 Peak 1	8.07	8.02	8.12
PCB-1248 Peak 2	8.97	8.92	9.02
PCB-1248 Peak 3	9.15	9.10	9.20
PCB-1248 Peak 4	10.19	10.18	10.28
PCB-1248 Peak 5	11.03	10.98	11.08

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/30 Calibration Date: 10/15/2013 05:40

Instrument ID: GC8 Calib Start Date: 10/14/2013 23:21

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/14/2013 23:21

Lab File ID: P1030429.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1262 Peak 1	Ave	1054564	1058806		0.502	0.500	0.4	20.0
PCB-1262 Peak 2	Ave	1112308	1172788		0.527	0.500	5.4	20.0
PCB-1262 Peak 3	Ave	1573854	1570382		0.499	0.500	-0.2	20.0
PCB-1262 Peak 4	Ave	523574	516652		0.493	0.500	-1.3	20.0
PCB-1262 Peak 5	Ave	1070404	1072566		0.501	0.500	0.2	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/30 Calibration Date: 10/15/2013 05:40

Instrument ID: GC8 Calib Start Date: 10/14/2013 23:21

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/14/2013 23:21

Lab File ID: P1030429.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1262 Peak 1	11.41	11.36	11.46
PCB-1262 Peak 2	11.95	11.91	12.01
PCB-1262 Peak 3	13.04	12.99	13.09
PCB-1262 Peak 4	14.01	13.96	14.06
PCB-1262 Peak 5	17.23	17.18	17.28

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/31 Calibration Date: 10/15/2013 06:09

Instrument ID: GC8 Calib Start Date: 10/14/2013 23:50

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/14/2013 23:50

Lab File ID: P1030430.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1268 Peak 1	Ave	3023882	3007502		0.497	0.500	-0.5	20.0
PCB-1268 Peak 2	Ave	2846994	2873184		0.505	0.500	0.9	20.0
PCB-1268 Peak 3	Ave	2785048	2804810		0.504	0.500	0.7	20.0
PCB-1268 Peak 4	Ave	8652636	8824990		0.510	0.500	2.0	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/31 Calibration Date: 10/15/2013 06:09

Instrument ID: GC8 Calib Start Date: 10/14/2013 23:50

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/14/2013 23:50

Lab File ID: P1030430.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1268 Peak 1	15.67	15.63	15.73
PCB-1268 Peak 2	15.82	15.78	15.88
PCB-1268 Peak 3	16.32	16.28	16.38
PCB-1268 Peak 4	17.86	17.82	17.92

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/32 Calibration Date: 10/15/2013 06:38

Instrument ID: GC8 Calib Start Date: 10/15/2013 00:19

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/15/2013 03:14

Lab File ID: P1030431.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	1381458	1222850		0.443	0.500	-11.5	20.0
PCB-1016 Peak 2	Ave	1693674	1436948		0.424	0.500	-15.2	20.0
PCB-1016 Peak 3	Ave	686389	614428		0.448	0.500	-10.5	20.0
PCB-1016 Peak 4	Ave	860385	785834		0.457	0.500	-8.7	20.0
PCB-1016 Peak 5	Ave	674203	602294		0.447	0.500	-10.7	20.0
PCB-1260 Peak 1	Ave	1450043	1375876		0.474	0.500	-5.1	20.0
PCB-1260 Peak 2	Ave	1571664	1482378		0.472	0.500	-5.7	20.0
PCB-1260 Peak 3	Ave	1565848	1500572		0.479	0.500	-4.2	20.0
PCB-1260 Peak 4	Ave	1059216	1030186		0.486	0.500	-2.7	20.0
PCB-1260 Peak 5	Ave	2267666	2176576		0.480	0.500	-4.0	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/32 Calibration Date: 10/15/2013 06:38

Instrument ID: GC8 Calib Start Date: 10/15/2013 00:19

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/15/2013 03:14

Lab File ID: P1030431.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	7.42	7.38	7.48
PCB-1016 Peak 2	8.06	8.04	8.14
PCB-1016 Peak 3	8.42	8.35	8.45
PCB-1016 Peak 4	8.96	8.91	9.01
PCB-1016 Peak 5	9.69	9.64	9.74
PCB-1260 Peak 1	11.40	11.35	11.45
PCB-1260 Peak 2	11.94	11.89	11.99
PCB-1260 Peak 3	12.83	12.77	12.87
PCB-1260 Peak 4	13.84	13.79	13.89
PCB-1260 Peak 5	14.67	14.61	14.71
Tetrachloro-m-xylene	0.00	6.34	6.44
DCB Decachlorobiphenyl (Surr)	18.24	18.20	18.30

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/38 Calibration Date: 10/15/2013 10:03

Instrument ID: GC8 Calib Start Date: 10/14/2013 17:59

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/14/2013 19:56

Lab File ID: P1030438.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1242 Peak 1	Ave	447461	426774		0.477	0.500	-4.6	20.0
PCB-1242 Peak 2	Ave	481329	478066		0.497	0.500	-0.7	20.0
PCB-1242 Peak 3	Ave	551185	534042		0.484	0.500	-3.1	20.0
PCB-1242 Peak 4	Ave	230790	254912		0.552	0.500	10.5	20.0
PCB-1242 Peak 5	Ave	423399	395690		0.467	0.500	-6.5	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: ICV 180-86759/38 Calibration Date: 10/15/2013 10:03

Instrument ID: GC8 Calib Start Date: 10/14/2013 17:59

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/14/2013 19:56

Lab File ID: P1030438.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1242 Peak 1	7.75	7.70	7.80
PCB-1242 Peak 2	8.42	8.36	8.46
PCB-1242 Peak 3	9.16	9.10	9.20
PCB-1242 Peak 4	9.54	9.49	9.59
PCB-1242 Peak 5	10.19	10.13	10.23

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: GC8 Start Date: 10/14/2013 15:33

Analysis Batch Number: 86759 End Date: 10/15/2013 15:32

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 180-86759/1		10/14/2013 15:33	1	P1030400.D	RTX-1701 0.53(mm)
IC 180-86759/2		10/14/2013 16:02	1	P1030401.D	RTX-1701 0.53(mm)
IC 180-86759/3		10/14/2013 16:32	1	P1030402.D	RTX-1701 0.53(mm)
IC 180-86759/4		10/14/2013 17:01	1	P1030403.D	RTX-1701 0.53(mm)
IC 180-86759/5		10/14/2013 17:30	1	P1030404.D	RTX-1701 0.53(mm)
IC 180-86759/6		10/14/2013 17:59	1	P1030405.D	RTX-1701 0.53(mm)
IC 180-86759/7		10/14/2013 18:29	1	P1030406.D	RTX-1701 0.53(mm)
IC 180-86759/8		10/14/2013 18:58	1	P1030407.D	RTX-1701 0.53(mm)
IC 180-86759/9		10/14/2013 19:27	1	P1030408.D	RTX-1701 0.53(mm)
IC 180-86759/10		10/14/2013 19:56	1	P1030409.D	RTX-1701 0.53(mm)
IC 180-86759/11		10/14/2013 20:25	1	P1030410.D	RTX-1701 0.53(mm)
IC 180-86759/12		10/14/2013 20:55	1	P1030411.D	RTX-1701 0.53(mm)
IC 180-86759/13		10/14/2013 21:24	1	P1030412.D	RTX-1701 0.53(mm)
IC 180-86759/14		10/14/2013 21:53	1	P1030413.D	RTX-1701 0.53(mm)
IC 180-86759/15		10/14/2013 22:22	1	P1030414.D	RTX-1701 0.53(mm)
IC 180-86759/16		10/14/2013 22:52	1	P1030415.D	RTX-1701 0.53(mm)
IC 180-86759/17		10/14/2013 23:21	1	P1030416.D	RTX-1701 0.53(mm)
IC 180-86759/18		10/14/2013 23:50	1	P1030417.D	RTX-1701 0.53(mm)
IC 180-86759/19		10/15/2013 00:19	1	P1030418.D	RTX-1701 0.53(mm)
IC 180-86759/20		10/15/2013 00:48	1	P1030419.D	RTX-1701 0.53(mm)
IC 180-86759/21		10/15/2013 01:17	1	P1030420.D	RTX-1701 0.53(mm)
ICRT 180-86759/22		10/15/2013 01:47	1	P1030421.D	RTX-1701 0.53(mm)
IC 180-86759/23		10/15/2013 02:16	1	P1030422.D	RTX-1701 0.53(mm)
IC 180-86759/24		10/15/2013 02:45	1	P1030423.D	RTX-1701 0.53(mm)
IC 180-86759/25		10/15/2013 03:14	1	P1030424.D	RTX-1701 0.53(mm)
ICV 180-86759/26		10/15/2013 03:43	1	P1030425.D	RTX-1701 0.53(mm)
ICV 180-86759/27		10/15/2013 04:13	1	P1030426.D	RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 04:42	1		RTX-1701 0.53(mm)
ICV 180-86759/29		10/15/2013 05:11	1	P1030428.D	RTX-1701 0.53(mm)
ICV 180-86759/30		10/15/2013 05:40	1	P1030429.D	RTX-1701 0.53(mm)
ICV 180-86759/31		10/15/2013 06:09	1	P1030430.D	RTX-1701 0.53(mm)
ICV 180-86759/32		10/15/2013 06:38	1	P1030431.D	RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 07:08	10		RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 07:37	10		RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 08:06	10		RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 08:35	10		RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 09:05	10		RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 09:34	10		RTX-1701 0.53(mm)
ICV 180-86759/38		10/15/2013 10:03	1	P1030438.D	RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 10:32	10		RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 11:02	10		RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 11:31	10		RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 12:00	10		RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 12:29	10		RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 12:59	10		RTX-1701 0.53(mm)

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: GC8 Start Date: 10/14/2013 15:33

Analysis Batch Number: 86759 End Date: 10/15/2013 15:32

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		10/15/2013 13:28	10		RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 13:57	1		RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 14:26	1		RTX-1701 0.53(mm)
ZZZZZ		10/15/2013 15:03	1		RTX-1701 0.53(mm)
CCV 180-86759/49		10/15/2013 15:32	1		RTX-1701 0.53(mm)

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCV 180-87359/6 Calibration Date: 10/17/2013 17:03

Instrument ID: GC8 Calib Start Date: 10/15/2013 00:19

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/15/2013 03:14

Lab File ID: P1030546.D. Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	1381458	1318334		0.477	0.500	-4.6	20.0
PCB-1016 Peak 2	Ave	1693674	1508558		0.445	0.500	-10.9	20.0
PCB-1016 Peak 3	Ave	686389	594998		0.433	0.500	-13.3	20.0
PCB-1016 Peak 4	Ave	860385	815678		0.474	0.500	-5.2	20.0
PCB-1016 Peak 5	Ave	674203	629256		0.467	0.500	-6.7	20.0
PCB-1260 Peak 1	Ave	1450043	1406442		0.485	0.500	-3.0	20.0
PCB-1260 Peak 2	Ave	1571664	1520036		0.484	0.500	-3.3	20.0
PCB-1260 Peak 3	Ave	1565848	1540430		0.492	0.500	-1.6	20.0
PCB-1260 Peak 4	Ave	1059216	1038920		0.490	0.500	-1.9	20.0
PCB-1260 Peak 5	Ave	2267666	2231606		0.492	0.500	-1.6	20.0
Tetrachloro-m-xylene	Ave	46451156	43128920		0.0232	0.0250	-7.2	20.0
DCB Decachlorobiphenyl (Surr)	Ave	22024276	20211360		0.0229	0.0250	-8.2	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCV 180-87359/6 Calibration Date: 10/17/2013 17:03

Instrument ID: GC8 Calib Start Date: 10/15/2013 00:19

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/15/2013 03:14

Lab File ID: P1030546.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	7.43	7.35	7.45
PCB-1016 Peak 2	8.07	7.99	8.09
PCB-1016 Peak 3	8.42	8.34	8.44
PCB-1016 Peak 4	8.97	8.89	8.99
PCB-1016 Peak 5	9.70	9.62	9.72
PCB-1260 Peak 1	11.41	11.33	11.43
PCB-1260 Peak 2	11.95	11.87	11.97
PCB-1260 Peak 3	12.84	12.75	12.85
PCB-1260 Peak 4	13.85	13.77	13.87
PCB-1260 Peak 5	14.68	14.59	14.69
Tetrachloro-m-xylene	6.40	6.33	6.43
DCB Decachlorobiphenyl (Surr)	18.26	18.19	18.29

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCVRT 180-87359/8 Calibration Date: 10/19/2013 22:56

Instrument ID: GC8 Calib Start Date: 10/15/2013 00:19

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/15/2013 03:14

Lab File ID: P1030656.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	1381458	1311118		0.475	0.500	-5.1	20.0
PCB-1016 Peak 2	Ave	1693674	1621812		0.479	0.500	-4.2	20.0
PCB-1016 Peak 3	Ave	686389	594604		0.433	0.500	-13.4	20.0
PCB-1016 Peak 4	Ave	860385	776354		0.451	0.500	-9.8	20.0
PCB-1016 Peak 5	Ave	674203	624418		0.463	0.500	-7.4	20.0
PCB-1260 Peak 1	Ave	1450043	1268280		0.437	0.500	-12.5	20.0
PCB-1260 Peak 2	Ave	1571664	1383268		0.440	0.500	-12.0	20.0
PCB-1260 Peak 3	Ave	1565848	1417580		0.453	0.500	-9.5	20.0
PCB-1260 Peak 4	Ave	1059216	918864		0.434	0.500	-13.3	20.0
PCB-1260 Peak 5	Ave	2267666	1998468		0.441	0.500	-11.9	20.0
Tetrachloro-m-xylene	Ave	46451156	45350360		0.0244	0.0250	-2.4	20.0
DCB Decachlorobiphenyl (Surr)	Ave	22024276	14751360		0.0167	0.0250	-33.0*	20.0

Surrogate no direct impact

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCVRT 180-87359/8 Calibration Date: 10/19/2013 22:56

Instrument ID: GC8 Calib Start Date: 10/15/2013 00:19

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/15/2013 03:14

Lab File ID: P1030656.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	7.40	7.35	7.45
PCB-1016 Peak 2	8.03	7.99	8.09
PCB-1016 Peak 3	8.39	8.34	8.44
PCB-1016 Peak 4	8.94	8.89	8.99
PCB-1016 Peak 5	9.67	9.62	9.72
PCB-1260 Peak 1	11.38	11.33	11.43
PCB-1260 Peak 2	11.92	11.87	11.97
PCB-1260 Peak 3	12.80	12.75	12.85
PCB-1260 Peak 4	13.82	13.77	13.87
PCB-1260 Peak 5	14.64	14.59	14.69
Tetrachloro-m-xylene	6.37	6.33	6.43
DCB Decachlorobiphenyl (Surr)	18.24	18.19	18.29

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCV 180-87359/19 Calibration Date: 10/20/2013 05:45

Instrument ID: GC8 Calib Start Date: 10/15/2013 00:19

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/15/2013 03:14

Lab File ID: P1030670.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	1381458	1412882		0.511	0.500	2.3	20.0
PCB-1016 Peak 2	Ave	1693674	1761250		0.520	0.500	4.0	20.0
PCB-1016 Peak 3	Ave	686389	638986		0.465	0.500	-6.9	20.0
PCB-1016 Peak 4	Ave	860385	847498		0.493	0.500	-1.5	20.0
PCB-1016 Peak 5	Ave	674203	671216		0.498	0.500	-0.4	20.0
PCB-1260 Peak 1	Ave	1450043	1416000		0.488	0.500	-2.3	20.0
PCB-1260 Peak 2	Ave	1571664	1579826		0.503	0.500	0.5	20.0
PCB-1260 Peak 3	Ave	1565848	1616442		0.516	0.500	3.2	20.0
PCB-1260 Peak 4	Ave	1059216	1066916		0.504	0.500	0.7	20.0
PCB-1260 Peak 5	Ave	2267666	2297974		0.507	0.500	1.3	20.0
Tetrachloro-m-xylene	Ave	46451156	47324760		0.0255	0.0250	1.9	20.0
DCB Decachlorobiphenyl (Surr)	Ave	22024276	17292840		0.0196	0.0250	-21.5*	20.0

surrogate
no direct impact

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCV 180-87359/19 Calibration Date: 10/20/2013 05:45

Instrument ID: GC8 Calib Start Date: 10/15/2013 00:19

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/15/2013 03:14

Lab File ID: P1030670.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	7.40	7.35	7.45
PCB-1016 Peak 2	8.03	7.99	8.09
PCB-1016 Peak 3	8.38	8.34	8.44
PCB-1016 Peak 4	8.94	8.89	8.99
PCB-1016 Peak 5	9.66	9.62	9.72
PCB-1260 Peak 1	11.37	11.33	11.43
PCB-1260 Peak 2	11.92	11.87	11.97
PCB-1260 Peak 3	12.79	12.75	12.85
PCB-1260 Peak 4	13.81	13.77	13.87
PCB-1260 Peak 5	14.63	14.59	14.69
Tetrachloro-m-xylene	6.37	6.33	6.43
DCB Decachlorobiphenyl (Surr)	18.23	18.19	18.29

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCV 180-87359/20 Calibration Date: 10/21/2013 09:55

Instrument ID: GC8 Calib Start Date: 10/15/2013 00:19

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/15/2013 03:14

Lab File ID: P1030720.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	1381458	1430864		0.518	0.500	3.6	20.0
PCB-1016 Peak 2	Ave	1693674	1761388		0.520	0.500	4.0	20.0
PCB-1016 Peak 3	Ave	686389	646464		0.471	0.500	-5.8	20.0
PCB-1016 Peak 4	Ave	860385	878942		0.511	0.500	2.2	20.0
PCB-1016 Peak 5	Ave	674203	725648		0.538	0.500	7.6	20.0
PCB-1260 Peak 1	Ave	1450043	1520680		0.524	0.500	4.9	20.0
PCB-1260 Peak 2	Ave	1571664	1691406		0.538	0.500	7.6	20.0
PCB-1260 Peak 3	Ave	1565848	1717062		0.548	0.500	9.7	20.0
PCB-1260 Peak 4	Ave	1059216	1154848		0.545	0.500	9.0	20.0
PCB-1260 Peak 5	Ave	2267666	2450208		0.540	0.500	8.0	20.0
Tetrachloro-m-xylene	Ave	46451156	48273720		0.0260	0.0250	3.9	20.0
DCB Decachlorobiphenyl (Surr)	Ave	22024276	17584360		0.0200	0.0250	-20.2*	20.0

Surrogate no direct impact

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCV 180-87359/20 Calibration Date: 10/21/2013 09:55

Instrument ID: GC8 Calib Start Date: 10/15/2013 00:19

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/15/2013 03:14

Lab File ID: P1030720.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	7.40	7.35	7.45
PCB-1016 Peak 2	8.03	7.99	8.09
PCB-1016 Peak 3	8.38	8.34	8.44
PCB-1016 Peak 4	8.93	8.89	8.99
PCB-1016 Peak 5	9.66	9.62	9.72
PCB-1260 Peak 1	11.37	11.33	11.43
PCB-1260 Peak 2	11.91	11.87	11.97
PCB-1260 Peak 3	12.79	12.75	12.85
PCB-1260 Peak 4	13.81	13.77	13.87
PCB-1260 Peak 5	14.63	14.59	14.69
Tetrachloro-m-xylene	6.37	6.33	6.43
DCB Decachlorobiphenyl (Surr)	18.23	18.19	18.29

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCV 180-87359/24 Calibration Date: 10/21/2013 12:51

Instrument ID: GC8 Calib Start Date: 10/15/2013 00:19

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/15/2013 03:14

Lab File ID: P1030726.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	1381458	1385546		0.501	0.500	0.3	20.0
PCB-1016 Peak 2	Ave	1693674	1675462		0.495	0.500	-1.1	20.0
PCB-1016 Peak 3	Ave	686389	641912		0.468	0.500	-6.5	20.0
PCB-1016 Peak 4	Ave	860385	862750		0.501	0.500	0.3	20.0
PCB-1016 Peak 5	Ave	674203	720600		0.534	0.500	6.9	20.0
PCB-1260 Peak 1	Ave	1450043	1464828		0.505	0.500	1.0	20.0
PCB-1260 Peak 2	Ave	1571664	1649132		0.525	0.500	4.9	20.0
PCB-1260 Peak 3	Ave	1565848	1677086		0.536	0.500	7.1	20.0
PCB-1260 Peak 4	Ave	1059216	1131188		0.534	0.500	6.8	20.0
PCB-1260 Peak 5	Ave	2267666	2363868		0.521	0.500	4.2	20.0
Tetrachloro-m-xylene	Ave	46451156	46123880		0.0248	0.0250	-0.7	20.0
DCB Decachlorobiphenyl (Surr)	Ave	22024276	17236960		0.0196	0.0250	-21.7*	20.0

Surrogate no direct impact

FORM VII

GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Lab Sample ID: CCV 180-87359/24 Calibration Date: 10/21/2013 12:51

Instrument ID: GC8 Calib Start Date: 10/15/2013 00:19

GC Column: RTX-1701 ID: 0.53(mm) Calib End Date: 10/15/2013 03:14

Lab File ID: P1030726.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	7.40	7.35	7.45
PCB-1016 Peak 2	8.04	7.99	8.09
PCB-1016 Peak 3	8.39	8.34	8.44
PCB-1016 Peak 4	8.94	8.89	8.99
PCB-1016 Peak 5	9.67	9.62	9.72
PCB-1260 Peak 1	11.38	11.33	11.43
PCB-1260 Peak 2	11.92	11.87	11.97
PCB-1260 Peak 3	12.80	12.75	12.85
PCB-1260 Peak 4	13.82	13.77	13.87
PCB-1260 Peak 5	14.64	14.59	14.69
Tetrachloro-m-xylene	6.38	6.33	6.43
DCB Decachlorobiphenyl (Surr)	18.24	18.19	18.29

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Instrument ID: GC8 Start Date: 10/17/2013 14:07

Analysis Batch Number: 87359 End Date: 10/21/2013 12:51

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 180-87359/1		10/17/2013 14:07	1	P1030540.D	RTX-1701 0.53(mm)
CCV 180-87359/2		10/17/2013 15:06	1	P1030542.D	RTX-1701 0.53(mm)
CCV 180-87359/3		10/17/2013 15:35	1	P1030543.D	RTX-1701 0.53(mm)
CCV 180-87359/4		10/17/2013 16:05	1	P1030544.D	RTX-1701 0.53(mm)
CCV 180-87359/5		10/17/2013 16:34	1	P1030545.D	RTX-1701 0.53(mm)
CCV 180-87359/6		10/17/2013 17:03	1	P1030546.D	RTX-1701 0.53(mm)
CCV 180-87359/7		10/17/2013 17:33	1	P1030547.D	RTX-1701 0.53(mm)
CCVRT 180-87359/8		10/19/2013 22:56	1	P1030656.D	RTX-1701 0.53(mm)
180-26012-1	MB-MW-02-20131009	10/19/2013 23:25	1	P1030657.D	RTX-1701 0.53(mm)
180-26012-1 MS	MB-MW-02-20131009 MS	10/19/2013 23:54	1	P1030658.D	RTX-1701 0.53(mm)
180-26012-1 MSD	MB-MW-02-20131009 MSD	10/20/2013 00:23	1	P1030659.D	RTX-1701 0.53(mm)
180-26012-3	MB-MW-03-20131009	10/20/2013 01:22	1	P1030661.D	RTX-1701 0.53(mm)
180-26012-4	MB-EB-20131009	10/20/2013 01:51	1	P1030662.D	RTX-1701 0.53(mm)
180-26012-7	DUP-20131009	10/20/2013 03:19	1	P1030665.D	RTX-1701 0.53(mm)
180-26012-8	MB-MW-05-20131010	10/20/2013 03:48	1	P1030666.D	RTX-1701 0.53(mm)
180-26012-9	MB-EB-20131010	10/20/2013 04:17	1	P1030667.D	RTX-1701 0.53(mm)
MB 180-86783/1-C		10/20/2013 04:46	1	P1030668.D	RTX-1701 0.53(mm)
LCS 180-86783/2-C		10/20/2013 05:15	1	P1030669.D	RTX-1701 0.53(mm)
CCV 180-87359/19		10/20/2013 05:45	1	P1030670.D	RTX-1701 0.53(mm)
CCV 180-87359/20		10/21/2013 09:55	1	P1030720.D	RTX-1701 0.53(mm)
180-26012-2	MB-MW-01-20131009	10/21/2013 10:24	1	P1030721.D	RTX-1701 0.53(mm)
180-26012-5	MB-MW-04-20131009	10/21/2013 10:54	1	P1030722.D	RTX-1701 0.53(mm)
180-26012-6	MB-MW-06-20131010	10/21/2013 11:23	1	P1030723.D	RTX-1701 0.53(mm)
CCV 180-87359/24		10/21/2013 12:51	1	P1030726.D	RTX-1701 0.53(mm)

FORM VIII
GC SEMI VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Sample No.: CCVRT 180-87359/8 Date Analyzed: 10/19/2013 22:56

Instrument ID: GC8 GC Column: RTX-1701 ID: 0.53(mm)

Lab File ID (Standard): P1030656.D Heated Purge: (Y/N) N

Calibration ID: 11841

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				6.37	18.24	
UPPER LIMIT				6.42	18.29	
LOWER LIMIT				6.32	18.19	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 180-87359/8		10/19/2013 22:56	P1030656.D	6.37	18.24	
180-26012-1	MB-MW-02-20131009	10/19/2013 23:25	P1030657.D	6.37	18.23	
180-26012-1 MS	MB-MW-02-20131009 MS	10/19/2013 23:54	P1030658.D	6.37	18.23	
180-26012-1 MSD	MB-MW-02-20131009 MSD	10/20/2013 00:23	P1030659.D	6.37	18.23	
180-26012-3	MB-MW-03-20131009	10/20/2013 01:22	P1030661.D	6.37	18.23	
180-26012-4	MB-EB-20131009	10/20/2013 01:51	P1030662.D	6.37	18.23	
180-26012-7	DUP-20131009	10/20/2013 03:19	P1030665.D	6.37	18.23	
180-26012-8	MB-MW-05-20131010	10/20/2013 03:48	P1030666.D	6.36	18.23	
180-26012-9	MB-EB-20131010	10/20/2013 04:17	P1030667.D	6.37	18.23	
MB 180-86783/1-C		10/20/2013 04:46	P1030668.D	6.37	18.23	
LCS 180-86783/2-C		10/20/2013 05:15	P1030669.D	6.37	18.23	
CCV 180-87359/19		10/20/2013 05:45	P1030670.D	6.37	18.23	
CCV 180-87359/20		10/21/2013 09:55	P1030720.D	6.37	18.23	
180-26012-2	MB-MW-01-20131009	10/21/2013 10:24	P1030721.D	6.37	18.23	
180-26012-5	MB-MW-04-20131009	10/21/2013 10:54	P1030722.D	6.37	18.23	
180-26012-6	MB-MW-06-20131010	10/21/2013 11:23	P1030723.D	6.37	18.24	
CCV 180-87359/24		10/21/2013 12:51	P1030726.D	6.38	18.24	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl (Surr)

TCX RT Limit = ± 0.05 minutes of surrogate RT
DCB RT Limit = ± 0.05 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-02-20131009 MS Lab Sample ID: 180-26012-1 MS

Instrument ID (1): Instrument ID (2): GC8

Date Analyzed (1): Date Analyzed (2): 10/19/2013 23:54

GC Column (1): ID: GC Column (2): RTX-1701 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION	
				FROM	TO	PEAK	MEAN
PCB-1016	2	1	7.40	7.35	7.45	1.06	1.02
		2	8.02	7.99	8.09	1.18	
		3	8.37	8.34	8.44	0.994	
		4	8.93	8.89	8.99	0.993	
		5	9.66	9.62	9.72	0.890	
PCB-1260	2	1	11.37	11.33	11.43	0.979	1.02
		2	11.91	11.87	11.97	1.05	
		3	12.79	12.75	12.85	1.05	
		4	13.81	13.77	13.87	0.973	
		5	14.63	14.59	14.69	1.03	

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-02-20131009 MSD Lab Sample ID: 180-26012-1 MSD

Instrument ID (1): Instrument ID (2): GC8

Date Analyzed (1): Date Analyzed (2): 10/20/2013 00:23

GC Column (1): ID: GC Column (2): RTX-1701 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		
				FROM	TO	PEAK	MEAN	
PCB-1016	2	1	7.40	7.35	7.45	1.16	1.13	
		2	8.02	7.99	8.09	1.26		
		3	8.37	8.34	8.44	1.11		
		4	8.93	8.89	8.99	1.09		
		5	9.66	9.62	9.72	1.00		
PCB-1260	2	1	11.37	11.33	11.43	1.07	1.12	
		2	11.91	11.87	11.97	1.14		
		3	12.79	12.75	12.85	1.16		
		4	13.81	13.77	13.87	1.07		
		5	14.63	14.59	14.69	1.14		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-86783/2-C

Instrument ID (1): Instrument ID (2): GC8

Date Analyzed (1): Date Analyzed (2): 10/20/2013 05:15

GC Column (1): ID: GC Column (2): RTX-1701 ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		
				FROM	TO	PEAK	MEAN	
PCB-1016	2	1	7.40	7.35	7.45	1.13	1.14	
		2	8.02	7.99	8.09	1.32		
		3	8.38	8.34	8.44	1.06		
		4	8.94	8.89	8.99	1.10		
		5	9.66	9.62	9.72	1.09		
PCB-1260	2	1	11.37	11.33	11.43	1.09	1.14	
		2	11.91	11.87	11.97	1.14		
		3	12.79	12.75	12.85	1.18		
		4	13.81	13.77	13.87	1.12		
		5	14.63	14.59	14.69	1.15		

GC SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Batch Number: 86783 Batch Start Date: 10/15/13 14:50 Batch Analyst: Yushinski, Charles

Batch Method: 3510C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ReceivedpH	InitialAmount	FinalAmount	GCMATRIXWORKS 00008	op-p/pcb sur 00009	
MB 180-86783/1		3510C, 3660B, 3665A, 8082A		6	1000 mL	1.0 mL		25 uL	
LCS 180-86783/2		3510C, 3660B, 3665A, 8082A		6	1000 mL	1.0 mL	25 uL	25 uL	
180-26012-D-1	MB-MW-02-20131009	3510C, 3660B, 3665A, 8082A	T	7	1060 mL	1.0 mL		25 uL	
180-26012-A-1 MS	MB-MW-02-20131009	3510C, 3660B, 3665A, 8082A	T	7	1010 mL	1.0 mL	25 uL	25 uL	
180-26012-C-1 MSD	MB-MW-02-20131009	3510C, 3660B, 3665A, 8082A	T	7	1010 mL	1.0 mL	25 uL	25 uL	
180-26012-D-2	MB-MW-01-20131009	3510C, 3660B, 3665A, 8082A	T	7	1050 mL	1.0 mL		25 uL	
180-26012-D-3	MB-MW-03-20131009	3510C, 3660B, 3665A, 8082A	T	7	1050 mL	1.0 mL		25 uL	
180-26012-C-4	MB-EB-20131009	3510C, 3660B, 3665A, 8082A	T	5	1050 mL	1.0 mL		25 uL	
180-26012-D-5	MB-MW-04-20131009	3510C, 3660B, 3665A, 8082A	T	7	1060 mL	1.0 mL		25 uL	
180-26012-C-7	DUP-20131009	3510C, 3660B, 3665A, 8082A	T	7	1040 mL	1.0 mL		25 uL	
180-26012-D-6	MB-MW-06-20131010	3510C, 3660B, 3665A, 8082A	T	7	1060 mL	1.0 mL		25 uL	
180-26012-A-8	MB-MW-05-20131010	3510C, 3660B, 3665A, 8082A	T	7	1050 mL	1.0 mL		25 uL	
180-26012-D-9	MB-EB-20131010	3510C, 3660B, 3665A, 8082A	T	5	1060 mL	1.0 mL		25 uL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Batch Number: 86783 Batch Start Date: 10/15/13 14:50 Batch Analyst: Yushinski, Charles

Batch Method: 3510C Batch End Date:

Batch Notes	
Exchange Solvent Lot #	963970
Exchange Solvent Name	Hexane
N-evap #	1
N-evap temperature	21 Celsius
Na2SO4 Lot Number	965232
Oven, Bath or Block Temperature 1	79 Celsius
Prep Solvent Lot #	984624
Prep Solvent Name	Methylene chloride
Prep Solvent Volume Used	180 mL
Person's name who did the prep	CBY
Sufficient volume for MS/MSD?	yes
Uncorrected N-evap Temperature	21 Celsius
Uncorrected Temperature	79 Celsius

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Batch Number: 86887 Batch Start Date: 10/16/13 13:05 Batch Analyst: Gupta, Ashok

Batch Method: 3660B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	GCTBASOLUTION 00013			
MB 180-86783/1-A		3660B, 3665A, 8082A		2 mL	2 mL	2 mL			
LCS 180-86783/2-A		3660B, 3665A, 8082A		2 mL	2 mL	2 mL			
180-26012-D-1-A	MB-MW-02-20131009	3660B, 3665A, 8082A	T	2 mL	2 mL	2 mL			
180-26012-A-1-A MS	MB-MW-02-20131009	3660B, 3665A, 8082A	T	2 mL	2 mL	2 mL			
180-26012-C-1-A MSD	MB-MW-02-20131009	3660B, 3665A, 8082A	T	2 mL	2 mL	2 mL			
180-26012-D-2-A	MB-MW-01-20131009	3660B, 3665A, 8082A	T	2 mL	2 mL	2 mL			
180-26012-D-3-A	MB-MW-03-20131009	3660B, 3665A, 8082A	T	2 mL	2 mL	2 mL			
180-26012-C-4-A	MB-EB-20131009	3660B, 3665A, 8082A	T	2 mL	2 mL	2 mL			
180-26012-D-5-A	MB-MW-04-20131009	3660B, 3665A, 8082A	T	2 mL	2 mL	2 mL			
180-26012-C-7-A	DUP-20131009	3660B, 3665A, 8082A	T	2 mL	2 mL	2 mL			
180-26012-D-6-A	MB-MW-06-20131010	3660B, 3665A, 8082A	T	2 mL	2 mL	2 mL			
180-26012-A-8-A	MB-MW-05-20131010	3660B, 3665A, 8082A	T	2 mL	2 mL	2 mL			
180-26012-D-9-A	MB-EB-20131010	3660B, 3665A, 8082A	T	2 mL	2 mL	2 mL			

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-26012-1

SDG No.:

Batch Number: 86888 Batch Start Date: 10/16/13 13:08 Batch Analyst: Gupta, Ashok

Batch Method: 3665A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
MB 180-86783/1-B		3665A, 8082A		2 mL	2 mL				
LCS 180-86783/2-B		3665A, 8082A		2 mL	2 mL				
180-26012-D-1-B	MB-MW-02-20131009	3665A, 8082A	T	2 mL	2 mL				
180-26012-A-1-C MS	MB-MW-02-20131009	3665A, 8082A	T	2 mL	2 mL				
180-26012-C-1-B MSD	MB-MW-02-20131009	3665A, 8082A	T	2 mL	2 mL				
180-26012-D-2-B	MB-MW-01-20131009	3665A, 8082A	T	2 mL	2 mL				
180-26012-D-3-B	MB-MW-03-20131009	3665A, 8082A	T	2 mL	2 mL				
180-26012-C-4-B	MB-EB-20131009	3665A, 8082A	T	2 mL	2 mL				
180-26012-D-5-B	MB-MW-04-20131009	3665A, 8082A	T	2 mL	2 mL				
180-26012-C-7-B	DUP-20131009	3665A, 8082A	T	2 mL	2 mL				
180-26012-D-6-B	MB-MW-06-20131010	3665A, 8082A	T	2 mL	2 mL				
180-26012-A-8-B	MB-MW-05-20131010	3665A, 8082A	T	2 mL	2 mL				
180-26012-D-9-B	MB-EB-20131010	3665A, 8082A	T	2 mL	2 mL				

Batch Notes	
Batch Comment	H2SO4 lot# 32783 is used for cleanup.

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-04-20131009 | Lab Sample ID: 180-26012-5

Matrix: Water | Lab File ID: P1030722.D

Analysis Method: 8082A | Date Collected: 10/09/2013 10:52

Extraction Method: 3510C | Date Extracted: 10/15/2013 14:50

Sample wt/vol: 1060(mL) | Date Analyzed: 10/21/2013 10:54

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-1701 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	ND		0.0094	0.0024
11104-28-2	PCB-1221	ND		0.0094	0.0023
11141-16-5	PCB-1232	ND		0.0094	0.0028
53469-21-9	PCB-1242	0.095		0.0094	0.0018
12672-29-6	PCB-1248	ND		0.0094	0.0021
11097-69-1	PCB-1254	ND		0.0094	0.0022
11096-82-5	PCB-1260	ND		0.0094	0.0013
37324-23-5	PCB-1262	ND		0.0094	0.0019
11100-14-4	PCB-1268	ND		0.0094	0.0026

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	95		50-140
877-09-8	Tetrachloro-m-xylene	143		47-150

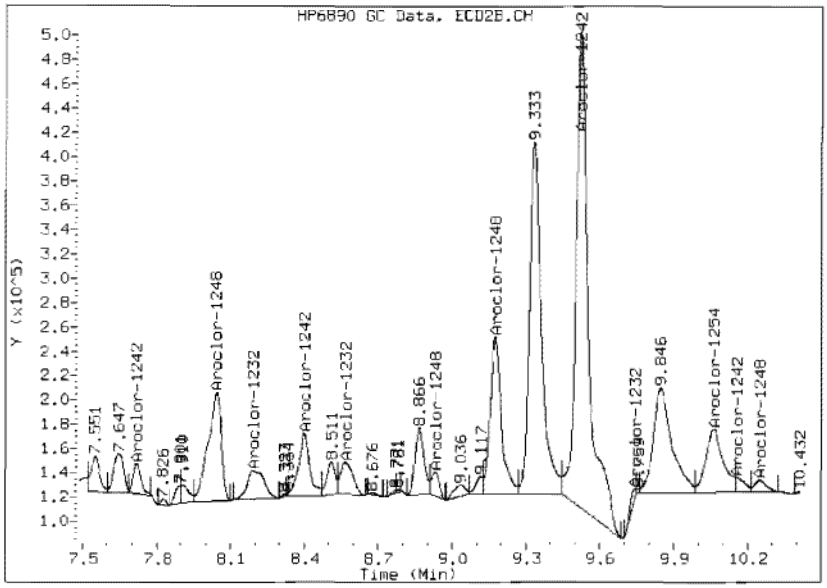
Manual Integration Report

Data File: P1030722.D
Inj. Date and Time: 21-OCT-2013 10:54
Instrument ID: gc8.i
Client ID: MB-MW-04-20131009
Compound: 5 Aroclor-1242
CAS #: 53469-21-9
Report Date: 10/21/2013

Processing Integration Results

RT	Response	Conc
7.72	24827*	0.06
8.40	51731	0.11
9.17	129320*	0.23
9.52	392570*	1.70
10.16	12084*	0.03

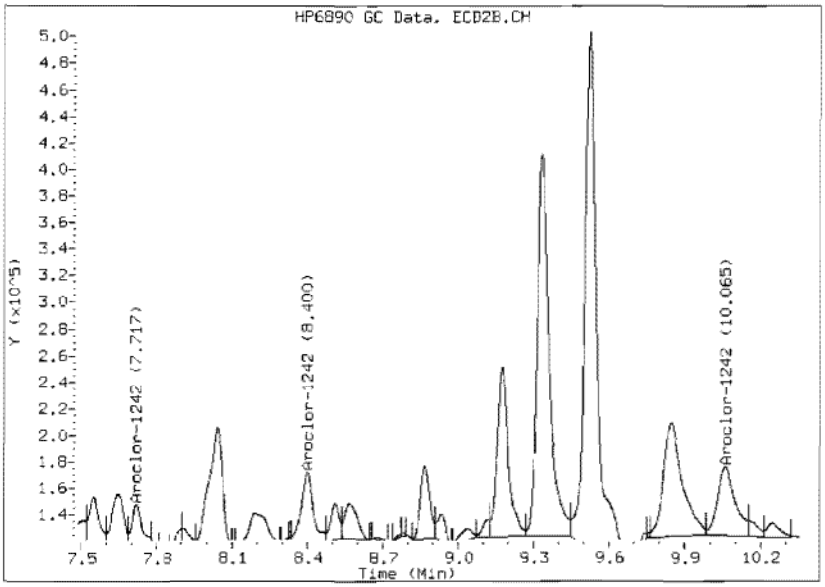
Final Conc		0.43



Manual Integration Results

RT	Response	Conc
7.72	32645*	0.07
8.40	51731	0.11
9.15	0*	0.00
9.54	0*	0.00
10.06	51766*	0.12

Final Conc		0.10



Manually Integrated By: guptaa
Modification Date: 21-Oct-2013 12:32
Manual Integration Reason: Poor Chromatography

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-26012-1

SDG No.:

Client Sample ID: MB-MW-06-20131010 | Lab Sample ID: 180-26012-6

Matrix: Water | Lab File ID: P1030723.D

Analysis Method: 8082A | Date Collected: 10/10/2013 08:10

Extraction Method: 3510C | Date Extracted: 10/15/2013 14:50

Sample wt/vol: 1060(mL) | Date Analyzed: 10/21/2013 11:23

Con. Extract Vol.: 1.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-1701 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 87359 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	PCB-1016	ND		0.0094	0.0024
11104-28-2	PCB-1221	ND		0.0094	0.0023
11141-16-5	PCB-1232	ND		0.0094	0.0028
53469-21-9	PCB-1242	0.015		0.0094	0.0018
12672-29-6	PCB-1248	ND		0.0094	0.0021
11097-69-1	PCB-1254	ND		0.0094	0.0022
11096-82-5	PCB-1260	ND		0.0094	0.0013
37324-23-5	PCB-1262	ND		0.0094	0.0019
11100-14-4	PCB-1268	ND		0.0094	0.0026

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	47	X	50-140
877-09-8	Tetrachloro-m-xylene	72		47-150

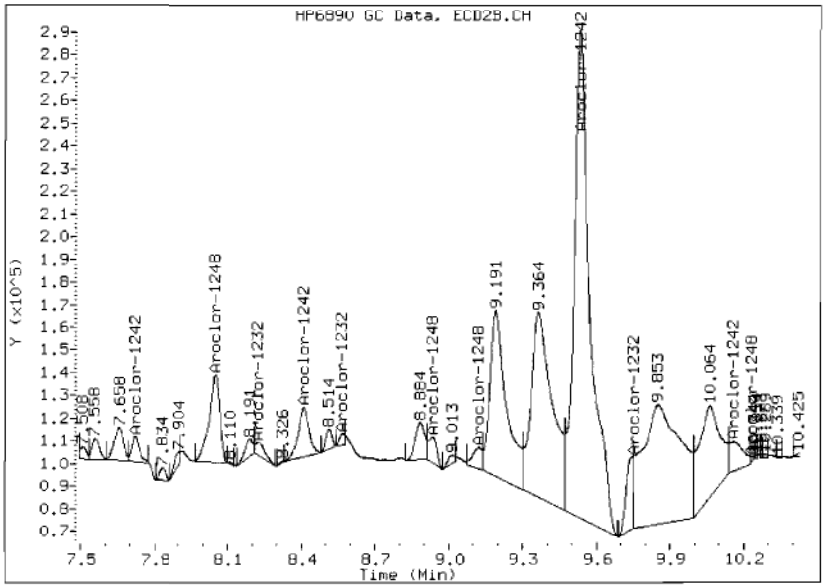
Manual Integration Report

Data File: P1030723.D
Inj. Date and Time: 21-OCT-2013 11:23
Instrument ID: gc8.i
Client ID: MB-MW-06-20131010
Compound: 5 Aroclor-1242
CAS #: 53469-21-9
Report Date: 10/21/2013

Processing Integration Results

RT	Response	Conc
7.72	11394	0.03
8.41	21527*	0.04
9.12	9588*	0.02
9.53	215486*	0.93
10.16	13347*	0.03

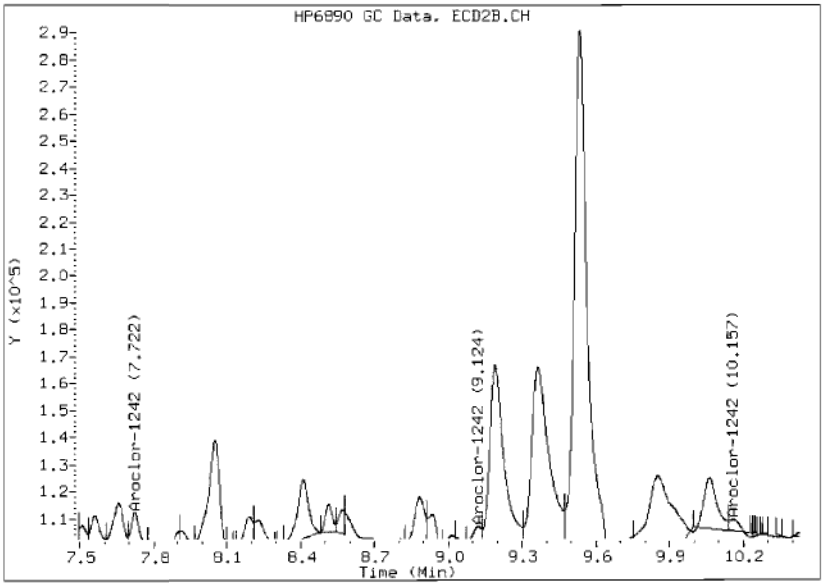
Final Conc		0.21



Manual Integration Results

RT	Response	Conc
7.72	11394	0.03
8.41	0*	0.00
9.12	7007*	0.01
9.54	0*	0.00
10.16	4245*	0.01

Final Conc		0.02



Manually Integrated By: guptaa
Modification Date: 21-Oct-2013 12:29
Manual Integration Reason: Poor Chromatography

SECTION 4

CASE NARRATIVE AND PROJECT CHAIN-OF-CUSTODY RECORD

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 180-26012-1

Job Description: Metal Bank Site

For:
ENVIRON International Corp.
214 Carnegie Center
Suite 200
Princeton, NJ 08540

Attention: Jessica Penetar

Approved for release.
Debra Bowen
Project Manager I
10/25/2013 11:37 AM

Designee for
Carrie L Gamber, Senior Project Manager
301 Alpha Drive, Pittsburgh, PA, 15238
(412)963-2428
carrie.gamber@testamericainc.com
10/25/2013

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238
Tel (412) 963-7058 Fax (412) 963-2468 www.testamericainc.com

CASE NARRATIVE

Client: ENVIRON International Corp.

Project: Metal Bank Site

Report Number: 180-26012-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 10/12/2013; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 5 coolers at receipt time were 1.2° C, 2.2° C, 2.6° C, 3.1° C and 3.9° C.

One of the Amber liters for sample MB-MW-04-20131009 PCB analysis was received half full. There is sufficient volume for analysis.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

3,3'-Dichlorobenzidine and Diethyl phthalate failed the recovery criteria low for the MS/MSD of sample MB-MW-02-20131009 (180-26012-1) in batch 180-87081. The associated laboratory control sample (LCS) recovery met acceptance criteria.

POLYCHLORINATED BIPHENYL

DCB Decachlorobiphenyl (Surr) failed the surrogate recovery criteria low for MB-MW-06-20131010 (180-26012-6).

Tetrachloro-m-xylene failed the surrogate recovery criteria high for MB-MW-05-20131010 (180-26012-8).

PCB-1016 and PCB-1260 failed the recovery criteria high for LCS 180-86783. These compounds were not detected in the associated samples. The positive bias is not believed to have an impact on data quality; therefore, all results are reported.

PCB-1016 and PCB-1260 failed the recovery criteria high for the MS/MSD of sample MB-MW-02-20131009 (180-26012-1).

SAMPLE SUMMARY

Client: ENVIRON International Corp.

Job Number: 180-26012-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
180-26012-1	MB-MW-02-20131009	Water	10/09/2013 1115	10/12/2013 0900
180-26012-1MS	MB-MW-02-20131009	Water	10/09/2013 1115	10/12/2013 0900
180-26012-1MSD	MB-MW-02-20131009	Water	10/09/2013 1115	10/12/2013 0900
180-26012-2	MB-MW-01-20131009	Water	10/09/2013 1300	10/12/2013 0900
180-26012-3	MB-MW-03-20131009	Water	10/09/2013 1405	10/12/2013 0900
180-26012-4	MB-EB-20131009	Water	10/09/2013 1530	10/12/2013 0900
180-26012-5	MB-MW-04-20131009	Water	10/09/2013 1052	10/12/2013 0900
180-26012-6	MB-MW-06-20131010	Water	10/10/2013 0810	10/12/2013 0900
180-26012-7	DUP-20131009	Water	10/09/2013 0000	10/12/2013 0900
180-26012-8	MB-MW-05-20131010	Water	10/10/2013 0955	10/12/2013 0900
180-26012-9	MB-EB-20131010	Water	10/10/2013 0900	10/12/2013 0900

Client: ENVIRON International Corp.

Job Number: 180-26012-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 180-86837					
LCS 180-86837/2-A	Lab Control Sample	T	Water	3520C	
MB 180-86837/1-A	Method Blank	T	Water	3520C	
180-26012-1	MB-MW-02-20131009	T	Water	3520C	
180-26012-1MS	Matrix Spike	T	Water	3520C	
180-26012-1MSD	Matrix Spike Duplicate	T	Water	3520C	
180-26012-2	MB-MW-01-20131009	T	Water	3520C	
180-26012-3	MB-MW-03-20131009	T	Water	3520C	
180-26012-4	MB-EB-20131009	T	Water	3520C	
180-26012-5	MB-MW-04-20131009	T	Water	3520C	
180-26012-7	DUP-20131009	T	Water	3520C	
Prep Batch: 180-86943					
LCS 180-86943/2-A	Lab Control Sample	T	Water	3520C	
LCSD 180-86943/3-A	Lab Control Sample Duplicate	T	Water	3520C	
MB 180-86943/1-A	Method Blank	T	Water	3520C	
180-26012-6	MB-MW-06-20131010	T	Water	3520C	
180-26012-8	MB-MW-05-20131010	T	Water	3520C	
180-26012-9	MB-EB-20131010	T	Water	3520C	
Analysis Batch:180-87081					
LCS 180-86837/2-A	Lab Control Sample	T	Water	8270D	180-86837
MB 180-86837/1-A	Method Blank	T	Water	8270D	180-86837
180-26012-1	MB-MW-02-20131009	T	Water	8270D	180-86837
180-26012-1MS	Matrix Spike	T	Water	8270D	180-86837
180-26012-1MSD	Matrix Spike Duplicate	T	Water	8270D	180-86837
180-26012-2	MB-MW-01-20131009	T	Water	8270D	180-86837
180-26012-3	MB-MW-03-20131009	T	Water	8270D	180-86837
180-26012-4	MB-EB-20131009	T	Water	8270D	180-86837
180-26012-5	MB-MW-04-20131009	T	Water	8270D	180-86837
180-26012-7	DUP-20131009	T	Water	8270D	180-86837
Analysis Batch:180-87196					
LCS 180-86943/2-A	Lab Control Sample	T	Water	8270D	180-86943
LCSD 180-86943/3-A	Lab Control Sample Duplicate	T	Water	8270D	180-86943
MB 180-86943/1-A	Method Blank	T	Water	8270D	180-86943
180-26012-6	MB-MW-06-20131010	T	Water	8270D	180-86943
180-26012-8	MB-MW-05-20131010	T	Water	8270D	180-86943
180-26012-9	MB-EB-20131010	T	Water	8270D	180-86943

Report Basis
T = Total

Client: ENVIRON International Corp.

Job Number: 180-26012-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 180-86783					
LCS 180-86783/2-C	Lab Control Sample	T	Water	3510C	
MB 180-86783/1-C	Method Blank	T	Water	3510C	
180-26012-1	MB-MW-02-20131009	T	Water	3510C	
180-26012-1MS	Matrix Spike	T	Water	3510C	
180-26012-1MSD	Matrix Spike Duplicate	T	Water	3510C	
180-26012-2	MB-MW-01-20131009	T	Water	3510C	
180-26012-3	MB-MW-03-20131009	T	Water	3510C	
180-26012-4	MB-EB-20131009	T	Water	3510C	
180-26012-5	MB-MW-04-20131009	T	Water	3510C	
180-26012-6	MB-MW-06-20131010	T	Water	3510C	
180-26012-7	DUP-20131009	T	Water	3510C	
180-26012-8	MB-MW-05-20131010	T	Water	3510C	
180-26012-9	MB-EB-20131010	T	Water	3510C	
Analysis Batch:180-87359					
LCS 180-86783/2-C	Lab Control Sample	T	Water	8082A	180-86783
MB 180-86783/1-C	Method Blank	T	Water	8082A	180-86783
180-26012-1	MB-MW-02-20131009	T	Water	8082A	180-86783
180-26012-1MS	Matrix Spike	T	Water	8082A	180-86783
180-26012-1MSD	Matrix Spike Duplicate	T	Water	8082A	180-86783
180-26012-2	MB-MW-01-20131009	T	Water	8082A	180-86783
180-26012-3	MB-MW-03-20131009	T	Water	8082A	180-86783
180-26012-4	MB-EB-20131009	T	Water	8082A	180-86783
180-26012-5	MB-MW-04-20131009	T	Water	8082A	180-86783
180-26012-6	MB-MW-06-20131010	T	Water	8082A	180-86783
180-26012-7	DUP-20131009	T	Water	8082A	180-86783
180-26012-8	MB-MW-05-20131010	T	Water	8082A	180-86783
180-26012-9	MB-EB-20131010	T	Water	8082A	180-86783

Report Basis
T = Total

Client: ENVIRON International Corp.

Job Number: 180-26012-1

Laboratory Chronicle

Lab ID: 180-26012-1 **Client ID:** MB-MW-02-20131009

Sample Date/Time: 10/09/2013 11:15 Received Date/Time: 10/12/2013 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-26012-A-1-B		180-87081	180-86837	10/16/2013 09:07	1	TAL PIT	BJT
A:8270D	180-26012-A-1-B		180-87081	180-86837	10/17/2013 14:12	1	TAL PIT	VVP
P:3510C	180-26012-D-1-C		180-87359	180-86783	10/15/2013 14:50	1	TAL PIT	CBY
A:8082A	180-26012-D-1-C		180-87359	180-86783	10/19/2013 23:25	1	TAL PIT	AKG

Lab ID: 180-26012-1 **Client ID:** MB-MW-02-20131009

Sample Date/Time: 10/09/2013 11:15 Received Date/Time: 10/12/2013 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-26012-B-1-A MS		180-87081	180-86837	10/16/2013 09:07	1	TAL PIT	BJT
A:8270D	180-26012-B-1-A MS		180-87081	180-86837	10/17/2013 15:04	1	TAL PIT	VVP
P:3510C	180-26012-A-1-D MS		180-87359	180-86783	10/15/2013 14:50	1	TAL PIT	CBY
A:8082A	180-26012-A-1-D MS		180-87359	180-86783	10/19/2013 23:54	1	TAL PIT	AKG

Lab ID: 180-26012-1 **Client ID:** MB-MW-02-20131009

Sample Date/Time: 10/09/2013 11:15 Received Date/Time: 10/12/2013 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-26012-B-1-B MSD		180-87081	180-86837	10/16/2013 09:07	1	TAL PIT	BJT
A:8270D	180-26012-B-1-B MSD		180-87081	180-86837	10/17/2013 15:31	1	TAL PIT	VVP
P:3510C	180-26012-C-1-C MSD		180-87359	180-86783	10/15/2013 14:50	1	TAL PIT	CBY
A:8082A	180-26012-C-1-C MSD		180-87359	180-86783	10/20/2013 00:23	1	TAL PIT	AKG

Lab ID: 180-26012-2 **Client ID:** MB-MW-01-20131009

Sample Date/Time: 10/09/2013 13:00 Received Date/Time: 10/12/2013 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-26012-A-2-A		180-87081	180-86837	10/16/2013 09:07	1	TAL PIT	BJT
A:8270D	180-26012-A-2-A		180-87081	180-86837	10/17/2013 15:57	1	TAL PIT	VVP
P:3510C	180-26012-D-2-C		180-87359	180-86783	10/15/2013 14:50	1	TAL PIT	CBY
A:8082A	180-26012-D-2-C		180-87359	180-86783	10/21/2013 10:24	1	TAL PIT	AKG

Client: ENVIRON International Corp.

Job Number: 180-26012-1

Laboratory Chronicle

Lab ID: 180-26012-3 **Client ID:** MB-MW-03-20131009

Sample Date/Time: 10/09/2013 14:05 Received Date/Time: 10/12/2013 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-26012-C-3-A		180-87081	180-86837	10/16/2013 09:07	1	TAL PIT	BJT
A:8270D	180-26012-C-3-A		180-87081	180-86837	10/17/2013 16:23	1	TAL PIT	VVP
P:3510C	180-26012-D-3-C		180-87359	180-86783	10/15/2013 14:50	1	TAL PIT	CBY
A:8082A	180-26012-D-3-C		180-87359	180-86783	10/20/2013 01:22	1	TAL PIT	AKG

Lab ID: 180-26012-4 **Client ID:** MB-EB-20131009

Sample Date/Time: 10/09/2013 15:30 Received Date/Time: 10/12/2013 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-26012-A-4-A		180-87081	180-86837	10/16/2013 09:07	1	TAL PIT	BJT
A:8270D	180-26012-A-4-A		180-87081	180-86837	10/17/2013 16:49	1	TAL PIT	VVP
P:3510C	180-26012-C-4-C		180-87359	180-86783	10/15/2013 14:50	1	TAL PIT	CBY
A:8082A	180-26012-C-4-C		180-87359	180-86783	10/20/2013 01:51	1	TAL PIT	AKG

Lab ID: 180-26012-5 **Client ID:** MB-MW-04-20131009

Sample Date/Time: 10/09/2013 10:52 Received Date/Time: 10/12/2013 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-26012-B-5-A		180-87081	180-86837	10/16/2013 09:07	1	TAL PIT	BJT
A:8270D	180-26012-B-5-A		180-87081	180-86837	10/17/2013 17:15	1	TAL PIT	VVP
P:3510C	180-26012-D-5-C		180-87359	180-86783	10/15/2013 14:50	1	TAL PIT	CBY
A:8082A	180-26012-D-5-C		180-87359	180-86783	10/21/2013 10:54	1	TAL PIT	AKG

Lab ID: 180-26012-6 **Client ID:** MB-MW-06-20131010

Sample Date/Time: 10/10/2013 08:10 Received Date/Time: 10/12/2013 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-26012-B-6-A		180-87196	180-86943	10/17/2013 06:31	1	TAL PIT	BJT
A:8270D	180-26012-B-6-A		180-87196	180-86943	10/18/2013 14:32	1	TAL PIT	VVP
P:3510C	180-26012-D-6-C		180-87359	180-86783	10/15/2013 14:50	1	TAL PIT	CBY
A:8082A	180-26012-D-6-C		180-87359	180-86783	10/21/2013 11:23	1	TAL PIT	AKG

Lab ID: 180-26012-7 **Client ID:** DUP-20131009

Sample Date/Time: 10/09/2013 00:00 Received Date/Time: 10/12/2013 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-26012-B-7-A		180-87081	180-86837	10/16/2013 09:07	1	TAL PIT	BJT
A:8270D	180-26012-B-7-A		180-87081	180-86837	10/17/2013 17:41	1	TAL PIT	VVP
P:3510C	180-26012-C-7-C		180-87359	180-86783	10/15/2013 14:50	1	TAL PIT	CBY
A:8082A	180-26012-C-7-C		180-87359	180-86783	10/20/2013 03:19	1	TAL PIT	AKG

Client: ENVIRON International Corp.

Job Number: 180-26012-1

Laboratory Chronicle

Lab ID: 180-26012-8 **Client ID:** MB-MW-05-20131010

Sample Date/Time: 10/10/2013 09:55 Received Date/Time: 10/12/2013 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-26012-D-8-A		180-87196	180-86943	10/17/2013 06:31	1	TAL PIT	BJT
A:8270D	180-26012-D-8-A		180-87196	180-86943	10/18/2013 14:58	1	TAL PIT	VVP
P:3510C	180-26012-A-8-C		180-87359	180-86783	10/15/2013 14:50	1	TAL PIT	CBY
A:8082A	180-26012-A-8-C		180-87359	180-86783	10/20/2013 03:48	1	TAL PIT	AKG

Lab ID: 180-26012-9 **Client ID:** MB-EB-20131010

Sample Date/Time: 10/10/2013 09:00 Received Date/Time: 10/12/2013 09:00

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	180-26012-C-9-A		180-87196	180-86943	10/17/2013 06:31	1	TAL PIT	BJT
A:8270D	180-26012-C-9-A		180-87196	180-86943	10/18/2013 15:24	1	TAL PIT	VVP
P:3510C	180-26012-D-9-C		180-87359	180-86783	10/15/2013 14:50	1	TAL PIT	CBY
A:8082A	180-26012-D-9-C		180-87359	180-86783	10/20/2013 04:17	1	TAL PIT	AKG

Lab ID: MB **Client ID:** N/A

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	MB 180-86837/1-A		180-87081	180-86837	10/16/2013 09:07	1	TAL PIT	BJT
A:8270D	MB 180-86837/1-A		180-87081	180-86837	10/17/2013 12:03	1	TAL PIT	VVP
P:3520C	MB 180-86943/1-A		180-87196	180-86943	10/17/2013 06:31	1	TAL PIT	BJT
A:8270D	MB 180-86943/1-A		180-87196	180-86943	10/18/2013 11:57	1	TAL PIT	VVP
P:3510C	MB 180-86783/1-C		180-87359	180-86783	10/15/2013 14:50	1	TAL PIT	CBY
A:8082A	MB 180-86783/1-C		180-87359	180-86783	10/20/2013 04:46	1	TAL PIT	AKG

Lab ID: LCS **Client ID:** N/A

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	LCS 180-86837/2-A		180-87081	180-86837	10/16/2013 09:07	1	TAL PIT	BJT
A:8270D	LCS 180-86837/2-A		180-87081	180-86837	10/17/2013 13:20	1	TAL PIT	VVP
P:3520C	LCS 180-86943/2-A		180-87196	180-86943	10/17/2013 06:31	1	TAL PIT	BJT
A:8270D	LCS 180-86943/2-A		180-87196	180-86943	10/18/2013 12:48	1	TAL PIT	VVP
P:3510C	LCS 180-86783/2-C		180-87359	180-86783	10/15/2013 14:50	1	TAL PIT	CBY
A:8082A	LCS 180-86783/2-C		180-87359	180-86783	10/20/2013 05:15	1	TAL PIT	AKG

Client: ENVIRON International Corp.

Job Number: 180-26012-1

Laboratory Chronicle

Lab ID: LCSD **Client ID:** N/A

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3520C	LCSD 180-86943/3-A		180-87196	180-86943	10/17/2013 06:31	1	TAL PIT	BJT
A:8270D	LCSD 180-86943/3-A		180-87196	180-86943	10/18/2013 13:14	1	TAL PIT	VVP

Lab References:
TAL PIT = TestAmerica Pittsburgh

Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice) M. McConnell	Samplers Name (Printed) M. McConnell	Site/Project Identification Metal Bank
Company ENVIRON	P. O. # ~~332161~~ 3331508H	State (Location of site): NJ: ☐ NY: ☐ Other: PA
Address 1760 Market Street, Suite 1000	Analysis Turnaround Time: Standard ☒	Regulatory Program:
City Philadelphia State PA	Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	LAB USE ONLY: Project No: / Job No:
Phone (215) 523-5661 Fax		180-26012 Chain of Custody

Sample Identification	Date	Time	Matrix	No. of Cont.	SVOCs	PCB Aroclors	Sample Numbers
MB-MW-02-20131009	10/9/13	1115	GW	4	X	X	SEND TO TA PITTSBURGH
MB-MW-02-20131009	10/9/13	1115					
MB-MW-02-MSD-20131009	10/9/13	1115					
MB-MW-01-20131009	"	1300					
MB-MW-03-20131009	"	1405					
MB-EB-20131009	"	1530	Bin GW				
MB-MW-04-20131009	"	1052					
MB-MW-06-20131010	10/10/13	0810					
DUP-20131009	10/9/13						
MB-MW-05-20131010	10/10/13	0955					

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH — Soil: / Water:
6 = Other _____, 7 = Other _____

Special Instructions Water Metals Filtered (Yes/No)? _____

Relinquished by	Company	Date / Time	Received by	Company
1) Erin Mayfield		10/11/13 10:41	1)	TA
2)		10/11/13 1200	2)	TA
3)	TA	10/11/13 1700	3) Fed Ex	
4)		10/12/13 900	4)	p.f TA

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132), Massachusetts (M-NJ312), North Carolina (No. 578)

TAL - 0016 (0408)

#811203 - 811207

777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY / ANALYSIS REQUEST

Name (for report and invoice): M. McConnell	Samplers Name (Printed): M. McConnell	Site/Project Identification: Metal Bank
Company: ENVIRON	P. O. #: 3331508M	State (Location of site): NJ: ☐ NY: ☐ Other: PA
Address: 1760 Market Street, Suite 1000	Analysis Turnaround Time: Standard ☒	Regulatory Program:
City: Philadelphia State: PA	Rush Chrages Authorized For: 2 Week ☐ 1 Week ☐ Other ☐	
Phone: 215 523-5601 Fax:		

Sample Identification	Date	Time	Matrix	No. of Cont.	SVOCs	PCB Aroclors								LAB USE ONLY Project No: / Job No: / Sample Numbers
MB-EB-20131010	10/10/13	0900	BW	4	X	X								SEND TO TEST AMERICA PITTSBURGH
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH 6 = Other _____, 7 = Other _____				Soil:										
				Water:										

Special Instructions

Water Metals Filtered (Yes/No)? _____

	Relinquished by	Company	Date / Time	Received by	Company
1)	Erin Mayfield		10/11/13 10:41		
2)			10/11 1200	2)	TA
3)		TA	10/11/13 1700	3) Fed Ex	
4)			10/12/13 900	4)	P&TA

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132). TAL - 0016 (0408)

Massachusetts (M-NJ312), North Carolina (No. 578)

811203 - 811207

Login Sample Receipt Checklist

Client: ENVIRON International Corp.

Job Number: 180-26012-1

Login Number: 26012
List Number: 1
Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

SECTION 5

PROJECT CORRESPONDENCE

Steve Zeiner

From: Steve Zeiner
Sent: Tuesday, November 12, 2013 2:03 PM
To: 'Jessica Penetar'; Danek, John <john.danek@testamericainc.com> (john.danek@testamericainc.com)
Subject: Data Request for SDG 180-26012-1

Follow Up Flag: Follow up
Flag Status: Flagged

Jessica,
During the review of the data package for SDG 180-26012-1 for the ENVIRON Metal Banks site, the chemist noted that the following information was not present in the data package:

- Form 10 for samples MB-MW-04-20131009 (laboratory ID 180-26012-5) and MB-MW-06-20131010 (laboratory ID 180-26012-6). Positive results for Aroclor-1242 were reported.
- The pentachlorophenol tailing factor determination, the benzidine tailing factor determination, and the DDT degradation report for the DFTPP tune performed on 10/17/13 at 10:57 (file ID N1017DF1.D).

Please have TestAmerica provide the missing information.

If you have any questions, please contact me.

Regards - Steve

Stephen T. Zeiner, CEAC
Senior Technical Chemist
Environmental Standards, Inc.
1140 Valley Forge Road • P.O. Box 810 • Valley Forge, PA 19482
610.935.5577 • Fax: 610.935.5583 • www.envstd.com • szeiner@envstd.com

Emergency Response Quality Assurance Hotline: 855.374.7272

ENVIRONMENTAL® STANDARDS

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01
ENVIRON Sample ID	MB-MW-01-20100729	MB-MW-01-20101018	MB-MW-01-20110111	MB-MW-01-20110411	MB-MW-01-20110725	MB-MW-01-20111026	MB-MW-01-20120424
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	7/29/2010	10/18/2010	1/11/2011	4/11/2011	7/25/2011	10/26/2011	4/24/2012
Comments							
SVOC							
Acenaphthene	0.585 (0.0148)	---	1.76 J (0.164)	---	0.71 J (1.9)	---	2.8 (0.21)
Acenaphthylene	0.306 (0.0157)	---	U (0.173)	---	U (0.15)	---	0.14 J (0.21)
Acetophenone	0.396 J (0.0824)	---	U (0.912)	---	U (0.78)	---	U (1)
Anthracene	U (0.0159)	---	U (0.176)	---	U (0.15)	---	0.35 (0.21)
Benzaldehyde	1.28 (0.154)	---	U (1.71)	---	U (1.5)	---	1 B (1)
Benzo(a)anthracene	U (0.0151)	---	U (0.168)	---	U (0.14)	---	U (0.21)
Benzo(a)pyrene	U (0.0138)	---	U (0.153)	---	U (0.13)	---	U (0.21)
Benzo(b)fluoranthene	U (0.0162)	---	U (0.179)	---	U (0.15)	---	0.68 B (0.21)
Benzo(g,h,i)perylene	U (0.0156)	---	U (0.172)	---	U (0.15)	---	0.17 B (0.21)
Benzo(k)fluoranthene	U (0.0563)	---	U (0.624)	---	U (0.53)	---	U (0.21)
Biphenyl	U (0.0427)	---	U (0.473)	---	U (0.4)	---	0.16 B (1)
bis(2-Chloroethyl) ether	U (0.0259)	---	U (0.286)	---	U (0.24)	---	U (0.21)
bis(2-Ethylhexyl)phthalate	U (1.29)	---	U (14.3)	---	U (12)	---	U (2.1)
Butylbenzylphthalate	U (0.147)	---	U (1.62)	---	U (1.4)	---	U (1)
Caprolactam	U (1.23)	---	U (13.6)	---	U (12)	---	U (5.2)
Carbazole	1.69 (0.0163)	---	2.05 J (0.18)	---	0.68 J (1.9)	---	2.4 (0.21)
4-Chloroaniline	U (0.0912)	---	U (1.01)	---	U (0.86)	---	U (1)
2-Chlorophenol	U (0.17)	---	U (1.88)	---	U (1.6)	---	UL (1)
4-Chlorophenyl-phenyl ether	U (0.0518)	---	U (0.573)	---	U (0.49)	---	0.07 J (1)
Chrysene	U (0.0144)	---	U (0.16)	---	U (0.14)	---	U (0.21)
Dibenz(a,h)anthracene	U (0.016)	---	U (0.177)	---	U (0.15)	---	0.51 B (0.21)
Dibenzofuran	0.0958 J (0.0636)	---	U (0.703)	---	U (0.6)	---	0.45 J (1)
2,4-Dichlorophenol	U (0.0344)	---	U (0.381)	---	U (0.32)	---	UL (0.21)
Diethylphthalate	U (0.15)	---	U (1.66)	---	U (1.4)	---	0.89 J (1)
2,4-Dimethylphenol	0.111 J (0.0878)	---	U (0.971)	---	U (0.83)	---	UL (1)
Dimethylphthalate	U (0.0788)	---	U (0.872)	---	U (0.74)	---	0.11 J (1)
Di-n-butylphthalate	U (0.129)	---	U (1.42)	---	U (1.2)	---	0.15 J (1)
Di-n-octylphthalate	U (0.213)	---	U (2.36)	---	U (2)	---	U (1)
Fluoranthene	U (0.0167)	---	U (0.185)	---	U (0.16)	---	U (0.21)
Fluorene	0.185 J (0.0222)	---	0.467 J (0.246)	---	0.24 J (1.9)	---	1 (0.21)
Indeno(1,2,3-cd)pyrene	U (0.0205)	---	U (0.227)	---	U (0.19)	---	0.4 B (0.21)
Isophorone	U (0.0663)	---	U (0.734)	---	U (0.63)	---	U (1)
2-Methylnaphthalene	0.052 J (0.0126)	---	0.599 J (0.139)	---	0.21 J (1.9)	---	1 B (0.21)
2-Methylphenol	U (0.0888)	---	U (0.983)	---	U (0.84)	---	UL (1)
3&4-Methylphenol	---	---	---	---	---	---	0.12 J (1)
4-Methylphenol	0.228 J (0.0929)	---	U (1.03)	---	U (0.88)	---	---
Naphthalene	0.189 J (0.0144)	---	74.6 (0.16)	---	20 (1.9)	---	79 B (0.42)
N-Nitrosodiphenylamine	U (0.0879)	---	U (0.972)	---	U (0.83)	---	U (1)
Pentachlorophenol	U (0.0683)	---	U (0.756)	---	U (0.64)	---	UL (1)
Phenanthrene	U (0.044)	---	U (0.487)	---	U (0.41)	---	0.68 (0.21)
Phenol	0.315 (0.0598)	---	U (0.662)	---	U (0.56)	---	UL (0.21)
Pyrene	U (0.0162)	---	U (0.179)	---	U (0.15)	---	U (0.21)
PCB Congeners							
13C12-PCB 114	---	---	---	---	---	U (0.0000421)	---
PCB-001 (2-CB)	0.00000153 JQ (0.00000027)	UB (0.00000039)	UB (0.000000451)	0.00000283 EMPC J (0.00000032)	UB (0.00000048)	0.0000153 B (0.0000421)	---
PCB-002 (3-CB)	U (0.000000297)	UB (0.000000413)	0.00000285 J (0.000000466)	UB (0.000000328)	U (0.0000005)	0.0000127 B (0.0000421)	---
PCB-003 (4-CB)	0.00000111 JQ (0.000000328)	UB (0.000000436)	0.00000198 EMPC J (0.000000479)	UB (0.000000335)	U (0.00000052)	0.000007 B (0.0000421)	---

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01
ENVIRON Sample ID	MB-MW-01-20100729	MB-MW-01-20101018	MB-MW-01-20110111	MB-MW-01-20110411	MB-MW-01-20110725	MB-MW-01-20111026	MB-MW-01-20120424
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	7/29/2010	10/18/2010	1/11/2011	4/11/2011	7/25/2011	10/26/2011	4/24/2012
Comments							
PCB-209 (DeCB)	U (0.000000735)	UB (0.00000116)	U (0.00000136)	0.0000017 J (0.000000647)	U (0.0000013)	0.00000211 EMPC J (0.0000421)	---
PCB-004 (2,2'-DiCB)	0.00000629 BJQ (0.00000177)	0.00001 BJQ (0.00000283)	0.00000417 JQ (0.00000333)	0.00000467 BJQ (0.00000204)	0.000007 JQ (0.0000032)	0.0000121 B (0.0000632)	---
PCB-005 (2,3-DiCB)	0.000000799 J (0.00000132)	U (0.00000161)	U (0.00000225)	UB (0.00000142)	U (0.0000023)	0.00000343 B (0.0000421)	---
PCB-006 (2,3'-DiCB)	0.00000248 JQ (0.00000124)	UB (0.00000152)	0.00000179 EMPC J (0.00000211)	UB (0.00000133)	UB (0.0000021)	0.00000569 B (0.0000421)	---
PCB-007 (2,4-DiCB)	0.00000164 JQ (0.00000128)	UB (0.00000156)	U (0.00000217)	UB (0.00000137)	UB (0.0000022)	0.0000045 B (0.0000421)	---
PCB-008 (2,4'-DiCB)	UB (0.00000122)	0.0000136 BJ (0.00000149)	UB (0.00000207)	UB (0.0000013)	UB (0.0000021)	0.0000124 B (0.0000632)	---
PCB-009 (2,5-DiCB)	U (0.00000129)	U (0.00000157)	U (0.00000218)	UB (0.00000138)	0.0000041 EMPC J (0.0000022)	0.00000372 B (0.0000421)	---
PCB-010 (2,6-DiCB)	U (0.00000138)	U (0.00000169)	U (0.00000235)	U (0.00000148)	UB (0.0000024)	U (0.0000421)	---
PCB-011 (3,3'-DiCB)	UB (0.00000122)	UB (0.00000149)	UB (0.00000208)	UB (0.00000131)	UB (0.0000021)	0.0000138 B (0.0000632)	---
PCB-012 (3,4-DiCB)	0.00000107 J (0.00000125)	U (0.00000153)	U (0.00000213)	UB (0.00000134)	0.0000026 EMPC J (0.0000022)	0.00000469 B (0.0000632)	---
PCB-013 (3,4'-DiCB)	0.00000107 J (0.00000125)	U (0.00000153)	U (0.00000213)	UB (0.00000134)	0.0000026 EMPC J (0.0000022)	0.00000469 B (0.0000632)	---
PCB-014 (3,5-DiCB)	U (0.00000108)	U (0.00000132)	U (0.00000184)	UB (0.00000116)	U (0.0000019)	0.00000374 B (0.0000421)	---
PCB-015 (4,4'-DiCB)	0.00000386 JQ (0.00000126)	UB (0.00000131)	UB (0.000002)	UB (0.00000128)	UB (0.0000021)	0.00000357 B (0.0000421)	---
PCB-170 (2,2',3,3',4,4',5-HpCB)	U (0.000000734)	U (0.00000102)	U (0.00000102)	UB (0.00000108)	U (0.0000012)	U (0.0000421)	---
PCB-171 (2,2',3,3',4,4',6-HpCB)	U (0.000000665)	U (0.00000096)	U (0.000000938)	U (0.000000979)	U (0.0000012)	U (0.0000421)	---
PCB-172 (2,2',3,3',4,5,5'-HpCB)	U (0.000000659)	U (0.000000951)	U (0.000000929)	U (0.00000097)	U (0.0000011)	U (0.0000421)	---
PCB-173 (2,2',3,3',4,5,6-HpCB)	U (0.000000665)	U (0.00000096)	U (0.000000938)	U (0.000000979)	U (0.0000012)	U (0.0000421)	---
PCB-174 (2,2',3,3',4,5,6'-HpCB)	0.00000302 JQ (0.000000617)	UB (0.00000089)	U (0.00000087)	UB (0.000000908)	U (0.0000011)	U (0.0000421)	---
PCB-175 (2,2',3,3',4,5',6-HpCB)	U (0.000000592)	U (0.000000855)	U (0.000000835)	U (0.000000872)	U (0.000001)	U (0.0000421)	---
PCB-177 (2,2',3,3',4,5',6'-HpCB)	U (0.000000632)	UB (0.000000912)	U (0.000000891)	U (0.00000093)	U (0.0000011)	U (0.0000421)	---
PCB-176 (2,2',3,3',4,6,6'-HpCB)	U (0.000000451)	U (0.000000651)	U (0.000000636)	U (0.000000664)	U (0.00000078)	U (0.0000421)	---
PCB-178 (2,2',3,3',5,5',6-HpCB)	U (0.00000064)	U (0.000000924)	U (0.000000903)	U (0.000000942)	U (0.0000011)	U (0.0000421)	---
PCB-179 (2,2',3,3',5,6,6'-HpCB)	U (0.000000476)	U (0.000000687)	U (0.000000671)	U (0.0000007)	U (0.00000082)	U (0.0000421)	---
PCB-180 (2,2',3,4,4',5,5'-HpCB)	0.00000458 J (0.000000503)	UB (0.000000726)	UB (0.000000709)	UB (0.00000074)	UB (0.00000087)	0.00000188 B (0.0000421)	---
PCB-181 (2,2',3,4,4',5,6-HpCB)	U (0.000000592)	U (0.000000854)	U (0.000000835)	U (0.000000871)	U (0.000001)	U (0.0000421)	---
PCB-182 (2,2',3,4,4',5,6'-HpCB)	U (0.000000575)	U (0.00000083)	U (0.000000811)	U (0.000000847)	U (0.000001)	U (0.0000421)	---
PCB-183 (2,2',3,4,4',5',6-HpCB)	U (0.000000588)	UB (0.000000848)	U (0.000000829)	U (0.000000865)	U (0.000001)	U (0.0000421)	---
PCB-185 (2,2',3,4,5,5',6-HpCB)	U (0.000000588)	0.00000221 JQ (0.000000848)	U (0.000000829)	U (0.000000865)	U (0.000001)	U (0.0000421)	---
PCB-187 (2,2',3,4',5,5',6-HpCB)	0.00000252 JQ (0.00000055)	0.00000871 BJ (0.000000794)	0.00000248 EMPC J (0.000000776)	UB (0.00000081)	0.0000019 J (0.00000095)	0.00000213 EMPC J (0.0000421)	---
PCB-188 (2,2',3,4',5,6,6'-HpCB)	0.00000106 JQ (0.000000407)	U (0.0000006)	U (0.000000579)	U (0.000000599)	U (0.00000071)	U (0.0000421)	---
PCB-189 (2,3,3',4,4',5,5'-HpCB)	U (0.000000413)	U (0.00000032)	U (0.000000483)	U (0.000000546)	U (0.00000092)	U (0.0000421)	---
PCB-190 (2,3,3',4,4',5,6-HpCB)	U (0.000000459)	U (0.000000662)	U (0.000000647)	U (0.000000675)	U (0.00000079)	U (0.0000421)	---
PCB-191 (2,3,3',4,4',5',6-HpCB)	U (0.000000451)	U (0.000000651)	U (0.000000636)	U (0.000000663)	U (0.00000078)	U (0.0000421)	---
PCB-193 (2,3,3',4',5,5',6-HpCB)	0.00000458 J (0.000000503)	UB (0.000000726)	UB (0.000000709)	UB (0.00000074)	UB (0.00000087)	0.00000188 B (0.0000421)	---
PCB-128 (2,2',3,3',4,4'-HxCB)	0.000000999 JQ (0.000000691)	0.00000181 J (0.000000748)	0.00000117 JQ (0.000000813)	0.00000295 J (0.000000791)	U (0.0000012)	U (0.0000421)	---
PCB-129 (2,2',3,3',4,5-HxCB)	UB (0.000000715)	UB (0.000000773)	UB (0.000000841)	UB (0.000000818)	UB (0.0000012)	0.00000727 J (0.0000421)	---
PCB-130 (2,2',3,3',4,5'-HxCB)	U (0.000000923)	U (0.000000998)	U (0.00000109)	U (0.00000106)	U (0.0000015)	U (0.0000421)	---
PCB-131 (2,2',3,3',4,6-HxCB)	U (0.000000945)	U (0.00000102)	U (0.00000111)	U (0.00000108)	U (0.0000016)	U (0.0000421)	---
PCB-132 (2,2',3,3',4,6'-HxCB)	0.0000028 JQ (0.000000899)	0.00000593 J (0.000000973)	0.00000363 J (0.00000106)	0.00000361 J (0.00000103)	0.0000032 J (0.0000015)	---	---
PCB-133 (2,2',3,3',5,5'-HxCB)	U (0.000000867)	U (0.000000938)	U (0.00000102)	U (0.000000993)	U (0.0000014)	---	---
PCB-134 (2,2',3,3',5,6-HxCB)	U (0.000000924)	U (0.000000999)	U (0.00000109)	UB (0.00000106)	U (0.0000015)	U (0.0000421)	---
PCB-135 (2,2',3,3',5,6'-HxCB)	0.00000419 JQ (0.000000794)	U (0.00000184)	U (0.00000113)	UB (0.00000111)	UB (0.0000016)	U (0.0000421)	---
PCB-136 (2,2',3,3',6,6'-HxCB)	0.0000014 JQ (0.000000583)	U (0.00000135)	U (0.000000831)	UB (0.000000818)	U (0.0000011)	U (0.0000421)	---
PCB-137 (2,2',3,4,4',5-HxCB)	U (0.000000796)	U (0.000000861)	U (0.000000936)	0.00000146 J (0.000000911)	U (0.0000013)	U (0.0000421)	---
PCB-138 (2,2',3,4,4',5'-HxCB)	UB (0.000000715)	UB (0.000000773)	UB (0.000000841)	UB (0.000000818)	UB (0.0000012)	---	---
PCB-139 (2,2',3,4,4',6-HxCB)	U (0.000000791)	U (0.000000856)	U (0.000000931)	UB (0.000000906)	U (0.0000013)	U (0.0000421)	---
PCB-140 (2,2',3,4,4',6'-HxCB)	U (0.000000791)	U (0.000000856)	U (0.000000931)	UB (0.000000906)	U (0.0000013)	U (0.0000421)	---
PCB-141 (2,2',3,4,5,5'-HxCB)	0.00000121 JQ (0.000000824)	0.00000281 BJQ (0.000000891)	0.00000168 J (0.000000969)	0.00000126 JQ (0.000000943)	U (0.0000014)	U (0.0000421)	---
PCB-143 (2,2',3,4,5,6'-HxCB)	U (0.000000924)	U (0.000000999)	U (0.00000109)	UB (0.00000106)	U (0.0000015)	U (0.0000421)	---
PCB-144 (2,2',3,4,5',6-HxCB)	U (0.000000737)	U (0.00000171)	U (0.00000105)	U (0.00000103)	U (0.0000014)	U (0.0000421)	---
PCB-146 (2,2',3,4',5,5'-HxCB)	U (0.000000752)	UB (0.000000813)	U (0.000000884)	UB (0.000000861)	U (0.0000013)	U (0.0000421)	---
PCB-147 (2,2',3,4',5,6-HxCB)	UB (0.000000768)	UB (0.000000831)	UB (0.000000904)	UB (0.00000088)	UB (0.0000013)	0.00000463 EMPC J (0.0000421)	---
PCB-148 (2,2',3,4',5,6'-HxCB)	U (0.000000779)	U (0.00000181)	U (0.00000111)	U (0.00000109)	U (0.0000015)	U (0.0000421)	---
PCB-149 (2,2',3,4',5',6-HxCB)	0.00000803 BJ (0.000000768)	0.0000123 BJ (0.000000831)	0.00000619 JQ (0.000000904)	0.00000784 BJ (0.00000088)	0.0000079 BJ (0.0000013)	0.00000463 EMPC J (0.0000421)	---
PCB-150 (2,2',3,4',6,6'-HxCB)	U (0.000000543)	U (0.00000126)	U (0.000000774)	0.00000157 JQ (0.000000762)	U (0.0000011)	U (0.0000421)	---
PCB-151 (2,2',3,5,5',6-HxCB)	0.00000419 JQ (0.000000794)	U (0.00000184)	U (0.00000113)	UB (0.00000111)	UB (0.0000016)	U (0.0000421)	---
PCB-152 (2,2',3,5,6,6'-HxCB)	U (0.000000554)	U (0.00000129)	U (0.00000079)	U (0.000000777)	U (0.0000011)	U (0.0000421)	---
PCB-153 (2,2',4,4',5,5'-HxCB)	UB (0.000000618)	UB (0.000000668)	UB (0.000000727)	UB (0.000000707)	UB (0.000001)	0.00000491 B (0.0000421)	---

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01
ENVIRON Sample ID	MB-MW-01-20100729	MB-MW-01-20101018	MB-MW-01-20110111	MB-MW-01-20110411	MB-MW-01-20110725	MB-MW-01-20111026	MB-MW-01-20120424
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	7/29/2010	10/18/2010	1/11/2011	4/11/2011	7/25/2011	10/26/2011	4/24/2012
Comments							
PCB-154 (2,2',4,4',5,6'-HxCB)	U (0.000000646)	U (0.0000015)	U (0.000000921)	U (0.000000906)	U (0.0000013)	U (0.0000421)	---
PCB-155 (2,2',4,4',6,6'-HxCB)	U (0.000000528)	U (0.00000123)	U (0.000000753)	0.00000109 JQ (0.000000741)	U (0.000001)	U (0.0000421)	---
PCB-156 (2,3,3',4,4',5-HxCB)	U (0.000000733)	U (0.000000824)	U (0.000000959)	0.00000294 J (0.000000853)	U (0.0000012)	U (0.0000421)	---
PCB-157 (2,3,3',4,4',5'-HxCB)	U (0.000000733)	U (0.000000824)	U (0.000000959)	UB (0.000000853)	U (0.0000012)	U (0.0000421)	---
PCB-158 (2,3,3',4,4',6-HxCB)	U (0.000000564)	UB (0.00000061)	U (0.000000663)	UB (0.000000646)	U (0.00000094)	U (0.0000421)	---
PCB-159 (2,3,3',4,5,5'-HxCB)	U (0.000000605)	U (0.000000654)	U (0.000000711)	U (0.000000692)	U (0.000001)	U (0.0000421)	---
PCB-160 (2,3,3',4,5,6-HxCB)	UB (0.000000715)	UB (0.000000773)	UB (0.000000841)	UB (0.000000818)	UB (0.0000012)	0.00000727 J (0.0000421)	---
PCB-162 (2,3,3',4',5,5'-HxCB)	U (0.000000597)	U (0.000000646)	U (0.000000702)	U (0.000000684)	U (0.000001)	U (0.0000421)	---
PCB-163 (2,3,3',4',5,6-HxCB)	UB (0.000000715)	UB (0.000000773)	UB (0.000000841)	UB (0.000000818)	UB (0.0000012)	0.00000727 J (0.0000421)	---
PCB-164 (2,3,3',4',5',6-HxCB)	U (0.000000629)	UB (0.000000681)	U (0.00000074)	UB (0.000000721)	U (0.0000011)	U (0.0000421)	---
PCB-166 (2,3,4,4',5,6-HxCB)	0.000000999 JQ (0.000000691)	UB (0.000000748)	UB (0.000000813)	UB (0.000000791)	U (0.0000012)	U (0.0000421)	---
PCB-167 (2,3',4,4',5,5'-HxCB)	U (0.000000459)	U (0.000000429)	U (0.000000517)	UB (0.000000558)	U (0.00000075)	U (0.0000421)	---
PCB-168 (2,3',4,4',5',6-HxCB)	UB (0.000000618)	UB (0.000000668)	UB (0.000000727)	UB (0.000000707)	UB (0.000001)	0.00000491 B (0.0000421)	---
PCB-169 (3,3',4,4',5,5'-HxCB)	U (0.000000474)	U (0.000000587)	U (0.000000511)	U (0.000000499)	U (0.00000082)	U (0.0000421)	---
PCB-206 (2,2',3,3',4,4',5,5',6-NoCB)	0.0000092 J (0.000000715)	0.0000249 J (0.00000112)	U (0.00000097)	UB (0.00000129)	U (0.0000014)	0.00000688 EMPC J (0.0000421)	---
PCB-207 (2,2',3,3',4,4',5,6,6'-NoCB)	U (0.000000508)	0.00000163 EMPC J (0.000000758)	U (0.000000652)	U (0.00000093)	U (0.0000009)	U (0.0000421)	---
PCB-208 (2,2',3,3',4,5,5',6,6'-NoCB)	0.00000283 JQ (0.000000528)	0.0000105 J (0.000000762)	U (0.000000654)	U (0.000000975)	U (0.00000089)	0.00000254 EMPC J (0.0000421)	---
PCB-194 (2,2',3,3',4,4',5,5'-OcCB)	0.0000016 J (0.000000582)	0.00000458 J (0.000000684)	U (0.000000754)	0.0000012 JQ (0.000000492)	U (0.00000094)	U (0.0000421)	---
PCB-195 (2,2',3,3',4,4',5,6-OcCB)	U (0.000000632)	U (0.000000742)	U (0.000000818)	U (0.000000534)	U (0.000001)	U (0.0000421)	---
PCB-196 (2,2',3,3',4,4',5,6'-OcCB)	U (0.000000682)	U (0.00000125)	U (0.000000993)	U (0.000000673)	U (0.0000012)	---	---
PCB-197 (2,2',3,3',4,4',6,6'-OcCB)	U (0.000000507)	U (0.000000929)	U (0.000000739)	U (0.000000501)	U (0.0000009)	U (0.0000421)	---
PCB-198 (2,2',3,3',4,5,5',6-OcCB)	0.00000534 J (0.000000704)	UB (0.00000129)	0.00000269 EMPC J (0.00000103)	UB (0.000000695)	U (0.0000012)	0.00000226 EMPC J (0.0000421)	---
PCB-199 (2,2',3,3',4,5,5',6'-OcCB)	0.00000534 J (0.000000704)	UB (0.00000129)	0.00000269 EMPC J (0.00000103)	UB (0.000000695)	U (0.0000012)	U (0.0000421)	---
PCB-200 (2,2',3,3',4,5,6,6'-OcCB)	U (0.000000498)	U (0.000000912)	U (0.000000726)	U (0.000000492)	U (0.00000088)	U (0.0000421)	---
PCB-201 (2,2',3,3',4,5',6,6'-OcCB)	U (0.000000481)	U (0.000000881)	U (0.0000007)	UB (0.000000475)	U (0.00000085)	0.00000226 EMPC J (0.0000421)	---
PCB-202 (2,2',3,3',5,5',6,6'-OcCB)	0.00000173 J (0.000000542)	0.00000534 J (0.000000992)	U (0.000000789)	UB (0.000000535)	U (0.00000096)	0.00000112 EMPC J (0.0000421)	---
PCB-203 (2,2',3,4,4',5,5',6-OcCB)	0.00000372 JQ (0.000000629)	0.00000873 EMPC J (0.00000115)	0.00000196 EMPC J (0.000000916)	UB (0.000000621)	U (0.0000011)	0.00000202 EMPC J (0.0000421)	---
PCB-204 (2,2',3,4,4',5,6,6'-OcCB)	U (0.000000527)	U (0.000000966)	U (0.000000768)	U (0.000000521)	U (0.00000094)	U (0.0000421)	---
PCB-205 (2,3,3',4,4',5,5',6-OcCB)	U (0.00000049)	U (0.000000576)	U (0.000000635)	U (0.000000415)	U (0.0000008)	U (0.0000421)	---
PCB-24/27	---	---	---	---	---	U (0.0000421)	---
PCB-42/59	---	---	---	---	---	0.00000278 J (0.0000421)	---
PCB-52/69	---	---	---	---	---	0.0000126 J (0.0000421)	---
PCB-61/70	---	---	---	---	---	0.00000903 B (0.0000421)	---
PCB-90/101	---	---	---	---	---	0.00000979 J (0.0000421)	---
PCB-107/109	---	---	---	---	---	U (0.0000421)	---
PCB-132/161	---	---	---	---	---	U (0.0000421)	---
PCB-133/142	---	---	---	---	---	U (0.0000421)	---
PCB-138/163/164	---	---	---	---	---	0.00000727 J (0.0000421)	---
PCB-196/203	---	---	---	---	---	U (0.0000421)	---
PCB-082 (2,2',3,3',4-PeCB)	U (0.000000758)	U (0.00000164)	U (0.00000107)	U (0.00000103)	U (0.0000015)	U (0.0000421)	---
PCB-083 (2,2',3,3',5-PeCB)	0.00000488 J (0.000000637)	UB (0.00000138)	UB (0.000000903)	UB (0.000000864)	0.0000053 EMPC J (0.0000012)	0.00000458 J (0.0000421)	---
PCB-084 (2,2',3,3',6-PeCB)	0.00000283 J (0.000000725)	UB (0.00000157)	U (0.00000103)	UB (0.000000983)	U (0.0000014)	U (0.0000421)	---
PCB-085 (2,2',3,4,4'-PeCB)	0.000000737 JQ (0.000000525)	U (0.00000114)	U (0.000000744)	UB (0.000000712)	U (0.000001)	U (0.0000421)	---
PCB-086 (2,2',3,4,5-PeCB)	UB (0.000000537)	UB (0.00000116)	UB (0.000000761)	UB (0.000000728)	UB (0.000001)	0.00000853 EMPC J (0.0000421)	---
PCB-087 (2,2',3,4,5'-PeCB)	0.00000609 BJQ (0.000000537)	0.000011 J (0.00000116)	0.00000599 J (0.000000761)	0.0000164 BJ (0.000000728)	0.0000075 JQ (0.000001)	0.00000853 EMPC J (0.0000421)	---
PCB-088 (2,2',3,4,6-PeCB)	U (0.000000646)	U (0.0000014)	U (0.000000915)	UB (0.000000876)	U (0.0000012)	U (0.0000421)	---
PCB-089 (2,2',3,4,6'-PeCB)	U (0.000000701)	U (0.00000152)	U (0.000000993)	U (0.000000951)	U (0.0000013)	U (0.0000421)	---
PCB-090 (2,2',3,4',5-PeCB)	0.00000983 BJ (0.000000546)	0.0000138 BJQ (0.00000119)	0.00000746 BJQ (0.000000774)	0.0000114 BJQ (0.000000741)	0.0000089 BJQ (0.000001)	---	---
PCB-097 (2,2',3,4',5'-PeCB)	UB (0.000000537)	UB (0.00000116)	UB (0.000000761)	UB (0.000000728)	UB (0.000001)	0.00000853 EMPC J (0.0000421)	---
PCB-091 (2,2',3,4',6-PeCB)	U (0.000000646)	U (0.0000014)	U (0.000000915)	0.00000464 JQ (0.000000876)	U (0.0000012)	U (0.0000421)	---
PCB-098 (2,2',3,4',6'-PeCB)	U (0.000000604)	U (0.00000131)	U (0.000000855)	UB (0.000000819)	U (0.0000012)	U (0.0000421)	---
PCB-092 (2,2',3,5,5'-PeCB)	0.00000103 JQ (0.00000062)	U (0.00000135)	U (0.000000879)	UB (0.000000841)	U (0.0000012)	U (0.0000421)	---
PCB-093 (2,2',3,5,6-PeCB)	U (0.000000623)	U (0.00000135)	U (0.000000882)	UB (0.000000845)	U (0.0000012)	U (0.0000421)	---
PCB-094 (2,2',3,5,6'-PeCB)	U (0.000000701)	U (0.00000152)	U (0.000000993)	U (0.00000095)	U (0.0000013)	U (0.0000421)	---
PCB-095 (2,2',3,5',6-PeCB)	0.00000951 J (0.00000066)	UB (0.00000143)	UB (0.000000935)	UB (0.000000895)	UB (0.0000013)	0.00000908 J (0.0000421)	---
PCB-096 (2,2',3,6,6'-PeCB)	U (0.000000524)	U (0.00000114)	U (0.000000743)	0.00000231 J (0.000000711)	U (0.000001)	U (0.0000421)	---
PCB-099 (2,2',4,4',5-PeCB)	0.00000488 J (0.000000637)	0.00000586 BJ (0.00000138)	0.00000376 JQ (0.000000903)	0.00000526 JQ (0.000000864)	0.0000053 JQ (0.0000012)	0.00000458 J (0.0000421)	---
PCB-100 (2,2',4,4',6-PeCB)	U (0.000000623)	U (0.00000135)	U (0.000000882)	UB (0.000000845)	U (0.0000012)	U (0.0000421)	---
PCB-101 (2,2',4,5,5'-PeCB)	UB (0.000000546)	UB (0.00000119)	UB (0.000000774)	UB (0.000000741)	UB (0.000001)	0.00000979 J (0.0000421)	---
PCB-102 (2,2',4,5,6'-PeCB)	U (0.000000604)	U (0.00000131)	U (0.000000855)	0.00000365 J (0.000000819)	U (0.0000012)	U (0.0000421)	---

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01
ENVIRON Sample ID	MB-MW-01-20100729	MB-MW-01-20101018	MB-MW-01-20110111	MB-MW-01-20110411	MB-MW-01-20110725	MB-MW-01-20111026	MB-MW-01-20120424
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	7/29/2010	10/18/2010	1/11/2011	4/11/2011	7/25/2011	10/26/2011	4/24/2012
Comments							
PCB-103 (2,2',4,5',6-PeCB)	U (0.000000615)	U (0.00000133)	U (0.000000871)	U (0.000000834)	U (0.0000012)	U (0.0000421)	---
PCB-104 (2,2',4,6,6'-PeCB)	U (0.000000467)	U (0.00000101)	U (0.000000662)	U (0.000000634)	U (0.0000009)	U (0.0000421)	---
PCB-105 (2,3,3',4,4'-PeCB)	0.00000256 J (0.000000433)	UB (0.00000034)	UB (0.000000467)	UB (0.000000463)	U (0.00000076)	0.00000193 B (0.0000421)	---
PCB-108 (2,3,3',4,5'-PeCB)	U (0.000000468)	U (0.000000369)	U (0.000000493)	UB (0.000000497)	U (0.00000079)	U (0.0000421)	---
PCB-109 (2,3,3',4,6-PeCB)	UB (0.000000537)	UB (0.00000116)	UB (0.000000761)	UB (0.000000728)	UB (0.000001)	0.00000853 EMPC J (0.0000421)	---
PCB-107 (2,3,3',4',5-PeCB)	U (0.000000446)	U (0.000000351)	U (0.000000469)	UB (0.000000472)	U (0.00000075)	---	---
PCB-110 (2,3,3',4',6-PeCB)	0.0000112 BJ (0.000000464)	0.0000136 BJQ (0.00000101)	0.0000104 BJQ (0.000000657)	0.0000136 J (0.000000629)	0.000014 BJQ (0.00000089)	0.0000102 B (0.0000421)	---
PCB-111 (2,3,3',5,5'-PeCB)	U (0.000000439)	U (0.000000952)	U (0.000000622)	U (0.000000595)	U (0.00000084)	U (0.0000421)	---
PCB-113 (2,3,3',5',6-PeCB)	UB (0.000000546)	UB (0.00000119)	UB (0.000000774)	UB (0.000000741)	UB (0.000001)	0.00000979 J (0.0000421)	---
PCB-114 (2,3,4,4',5-PeCB)	U (0.000000415)	U (0.000000335)	U (0.000000431)	U (0.000000444)	U (0.00000071)	---	---
PCB-115 (2,3,4,4',6-PeCB)	UB (0.000000464)	UB (0.00000101)	UB (0.000000657)	UB (0.000000629)	UB (0.00000089)	0.0000102 EMPC J (0.0000421)	---
PCB-116 (2,3,4,5,6-PeCB)	0.000000737 JQ (0.000000525)	U (0.00000114)	U (0.000000744)	0.00000413 JQ (0.000000712)	U (0.000001)	U (0.0000421)	---
PCB-117 (2,3,4',5,6-PeCB)	0.000000737 JQ (0.000000525)	U (0.00000114)	U (0.000000744)	UB (0.000000712)	U (0.000001)	U (0.0000421)	---
PCB-118 (2,3',4,4',5-PeCB)	0.00000691 BJ (0.00000043)	0.00000808 BJ (0.000000338)	0.00000896 BJQ (0.000000434)	0.00000716 J (0.000000453)	0.0000081 BJQ (0.00000074)	0.00000542 B (0.0000421)	---
PCB-119 (2,3',4,4',6-PeCB)	UB (0.000000537)	UB (0.00000116)	UB (0.000000761)	UB (0.000000728)	UB (0.000001)	0.00000853 EMPC J (0.0000421)	---
PCB-120 (2,3',4,5,5'-PeCB)	U (0.000000452)	U (0.00000098)	U (0.00000064)	U (0.000000613)	U (0.00000087)	U (0.0000421)	---
PCB-121 (2,3',4,5',6-PeCB)	U (0.000000455)	U (0.000000988)	U (0.000000645)	U (0.000000617)	U (0.00000087)	U (0.0000421)	---
PCB-122 (2,3,3',4',5'-PeCB)	U (0.0000005)	U (0.000000394)	U (0.000000526)	U (0.00000053)	U (0.00000085)	U (0.0000421)	---
PCB-123 (2,3',4,4',5'-PeCB)	U (0.000000477)	U (0.000000362)	U (0.000000478)	UB (0.000000512)	U (0.00000081)	U (0.0000421)	---
PCB-124 (2,3',4',5,5'-PeCB)	U (0.000000468)	U (0.000000369)	U (0.000000493)	UB (0.000000497)	U (0.00000079)	U (0.0000421)	---
PCB-125 (2,3',4',5',6-PeCB)	UB (0.000000537)	UB (0.00000116)	UB (0.000000761)	UB (0.000000728)	UB (0.000001)	0.00000853 EMPC J (0.0000421)	---
PCB-126 (3,3',4,4',5-PeCB)	U (0.00000045)	U (0.000000361)	U (0.000000516)	UB (0.000000467)	U (0.00000072)	U (0.0000421)	---
PCB-127 (3,3',4,5,5'-PeCB)	U (0.000000454)	U (0.000000358)	U (0.000000478)	U (0.000000481)	U (0.00000077)	U (0.0000421)	---
PCB-040 (2,2',3,3'-TeCB)	0.00000629 J (0.000000717)	0.00000702 BJ (0.00000073)	UB (0.000000766)	UB (0.000000787)	0.0000081 J (0.000001)	0.00000474 EMPC J (0.0000421)	---
PCB-041 (2,2',3,4-TeCB)	0.00000629 J (0.000000717)	0.00000702 BJ (0.00000073)	UB (0.000000766)	UB (0.000000787)	0.0000081 J (0.000001)	0.00000474 EMPC J (0.0000421)	---
PCB-042 (2,2',3,4'-TeCB)	0.00000239 J (0.00000073)	UB (0.000000743)	0.00000271 EMPC J (0.00000078)	UB (0.000000801)	0.0000038 EMPC J (0.000001)	---	---
PCB-043 (2,2',3,5-TeCB)	U (0.00000067)	U (0.000000683)	U (0.000000716)	UB (0.000000736)	U (0.00000096)	U (0.0000421)	---
PCB-044 (2,2',3,5'-TeCB)	UB (0.000000641)	UB (0.000000653)	UB (0.000000685)	UB (0.000000704)	UB (0.00000092)	0.0000217 B (0.0000421)	---
PCB-045 (2,2',3,6-TeCB)	UB (0.000000744)	UB (0.000000757)	0.00000248 EMPC J (0.000000794)	UB (0.000000816)	0.000004 EMPC J (0.0000011)	0.00000492 B (0.0000421)	---
PCB-046 (2,2',3,6'-TeCB)	0.00000138 JQ (0.000000879)	U (0.000000895)	U (0.000000939)	UB (0.000000965)	U (0.0000013)	U (0.0000421)	---
PCB-047 (2,2',4,4'-TeCB)	UB (0.000000641)	UB (0.000000653)	UB (0.000000685)	UB (0.000000704)	UB (0.00000092)	0.0000217 B (0.0000421)	---
PCB-048 (2,2',4,5-TeCB)	0.00000202 J (0.000000712)	UB (0.000000725)	0.00000132 EMPC J (0.00000076)	UB (0.000000781)	0.000002 EMPC J (0.000001)	U (0.0000421)	---
PCB-049 (2,2',4,5'-TeCB)	0.00000584 J (0.000000591)	UB (0.000000602)	UB (0.000000631)	UB (0.000000649)	UB (0.00000085)	0.00000478 B (0.0000421)	---
PCB-050 (2,2',4,6-TeCB)	0.00000163 JQ (0.00000069)	0.00000291 J (0.000000703)	0.00000228 J (0.000000737)	UB (0.000000758)	0.0000036 J (0.00000099)	0.00000153 EMPC J (0.0000421)	---
PCB-051 (2,2',4,6'-TeCB)	0.00000516 BJ (0.000000744)	0.00000519 BJ (0.000000757)	0.00000248 JQ (0.000000794)	0.00000633 J (0.000000816)	0.000004 JQ (0.0000011)	0.00000492 B (0.0000421)	---
PCB-052 (2,2',5,5'-TeCB)	UB (0.000000691)	UB (0.000000704)	UB (0.000000739)	UB (0.000000759)	UB (0.00000099)	---	---
PCB-053 (2,2',5,6'-TeCB)	0.00000163 JQ (0.00000069)	0.00000291 J (0.000000703)	0.00000228 J (0.000000737)	UB (0.000000758)	0.0000036 J (0.00000099)	0.00000153 EMPC J (0.0000421)	---
PCB-054 (2,2',6,6'-TeCB)	U (0.000000774)	U (0.00000117)	U (0.000000963)	0.00000211 JQ (0.00000114)	U (0.0000018)	U (0.0000421)	---
PCB-055 (2,3,3',4-TeCB)	U (0.000000556)	U (0.000000566)	U (0.000000593)	UB (0.00000061)	U (0.00000079)	U (0.0000421)	---
PCB-056 (2,3,3',4'-TeCB)	0.00000225 JQ (0.000000523)	UB (0.000000532)	UB (0.000000558)	UB (0.000000574)	UB (0.00000075)	0.00000291 J (0.0000421)	---
PCB-057 (2,3,3',5-TeCB)	U (0.000000529)	U (0.000000539)	U (0.000000565)	UB (0.000000581)	U (0.00000076)	U (0.0000421)	---
PCB-058 (2,3,3',5'-TeCB)	U (0.000000526)	U (0.000000536)	U (0.000000562)	UB (0.000000578)	U (0.00000075)	U (0.0000421)	---
PCB-059 (2,3,3',6-TeCB)	0.00000122 J (0.000000511)	U (0.00000052)	000000633 EMPC J (0.000000545)	UB (0.000000561)	U (0.00000073)	0.00000102 EMPC J (0.0000421)	---
PCB-060 (2,3,4,4'-TeCB)	0.00000143 JQ (0.000000538)	UB (0.000000548)	U (0.000000575)	UB (0.000000591)	UB (0.00000077)	0.00000168 EMPC J (0.0000421)	---
PCB-061 (2,3,4,5-TeCB)	UB (0.00000051)	UB (0.00000052)	UB (0.000000545)	UB (0.00000056)	UB (0.00000073)	---	---
PCB-062 (2,3,4,6-TeCB)	0.00000122 J (0.000000511)	U (0.00000052)	000000633 EMPC J (0.000000545)	UB (0.000000561)	U (0.00000073)	0.00000102 EMPC J (0.0000421)	---
PCB-063 (2,3,4',5-TeCB)	U (0.00000049)	U (0.0000005)	U (0.000000524)	UB (0.000000538)	U (0.0000007)	U (0.0000421)	---
PCB-064 (2,3,4',6-TeCB)	UB (0.000000483)	UB (0.000000492)	UB (0.000000516)	UB (0.000000531)	UB (0.00000069)	0.00000549 J (0.0000421)	---
PCB-065 (2,3,5,6-TeCB)	UB (0.000000641)	UB (0.000000653)	UB (0.000000685)	UB (0.000000704)	UB (0.00000092)	0.0000217 B (0.0000421)	---
PCB-066 (2,3',4,4'-TeCB)	0.00000477 J (0.000000507)	UB (0.000000516)	UB (0.000000541)	UB (0.000000556)	UB (0.00000073)	0.00000589 B (0.0000421)	---
PCB-067 (2,3',4,5-TeCB)	U (0.000000476)	U (0.000000484)	U (0.000000508)	UB (0.000000522)	U (0.00000068)	U (0.0000421)	---
PCB-068 (2,3',4,5'-TeCB)	0.00000393 J (0.000000479)	UB (0.000000488)	UB (0.000000512)	UB (0.000000526)	U (0.00000069)	U (0.0000421)	---
PCB-069 (2,3',4,6-TeCB)	0.00000584 J (0.000000591)	UB (0.000000602)	UB (0.000000631)	UB (0.000000649)	UB (0.00000085)	0.00000478 B (0.0000421)	---
PCB-070 (2,3',4',5-TeCB)	UB (0.00000051)	UB (0.00000052)	UB (0.000000545)	UB (0.00000056)	UB (0.00000073)	0.00000903 B (0.0000421)	---
PCB-076 (2,3',4',5'-TeCB)	UB (0.00000051)	UB (0.00000052)	UB (0.000000545)	UB (0.00000056)	UB (0.00000073)	0.00000903 B (0.0000421)	---
PCB-071 (2,3',4',6-TeCB)	0.00000629 J (0.000000717)	0.00000702 BJ (0.00000073)	UB (0.000000766)	UB (0.000000787)	0.0000081 J (0.000001)	0.00000474 EMPC J (0.0000421)	---
PCB-072 (2,3',5,5'-TeCB)	U (0.000000515)	U (0.000000524)	U (0.00000055)	UB (0.000000565)	U (0.00000074)	U (0.0000421)	---
PCB-073 (2,3',5',6-TeCB)	U (0.00000067)	U (0.000000683)	U (0.000000716)	UB (0.000000736)	U (0.00000096)	U (0.0000421)	---
PCB-074 (2,4,4',5-TeCB)	UB (0.00000051)	UB (0.00000052)	UB (0.000000545)	UB (0.00000056)	UB (0.00000073)	0.00000903 B (0.0000421)	---
PCB-075 (2,4,4',6-TeCB)	0.00000122 J (0.000000511)	U (0.00000052)	000000633 EMPC J (0.000000545)	UB (0.000000561)	U (0.00000073)	0.00000102 EMPC J (0.0000421)	---
PCB-077 (3,3',4,4'-TeCB)	U (0.000000497)	0.000000622 EMPC J (0.000000504)	U (0.000000539)	UB (0.00000053)	0.0000015 J (0.0000007)	U (0.0000421)	---

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-01
ENVIRON Sample ID	MB-MW-01-20100729	MB-MW-01-20101018	MB-MW-01-20110111	MB-MW-01-20110411	MB-MW-01-20110725	MB-MW-01-20111026	MB-MW-01-20120424
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	7/29/2010	10/18/2010	1/11/2011	4/11/2011	7/25/2011	10/26/2011	4/24/2012
Comments							
PCB-078 (3,3',4,5-TeCB)	U (0.000000547)	U (0.000000557)	U (0.000000584)	UB (0.0000006)	U (0.00000078)	U (0.0000421)	---
PCB-079 (3,3',4,5'-TeCB)	U (0.00000048)	U (0.000000489)	U (0.000000512)	UB (0.000000527)	U (0.00000069)	U (0.0000421)	---
PCB-081 (3,4,4',5-TeCB)	U (0.000000494)	U (0.000000505)	U (0.00000052)	UB (0.000000559)	U (0.00000072)	U (0.0000421)	---
PCB-016 (2,2',3-TrCB)	0.00000611 JQ (0.00000101)	U (0.00000262)	0.00000558 J (0.00000176)	UB (0.00000128)	UB (0.000002)	U (0.0000421)	---
PCB-017 (2,2',4-TrCB)	0.00000699 J (0.000000846)	UB (0.00000219)	0.00000601 J (0.00000146)	UB (0.00000107)	UB (0.0000017)	U (0.0000421)	---
PCB-018 (2,2',5-TrCB)	0.000014 J (0.000000749)	UB (0.00000194)	UB (0.0000013)	UB (0.000000948)	UB (0.0000015)	0.00000624 B (0.0000632)	---
PCB-019 (2,2',6-TrCB)	0.00000309 J (0.00000104)	0.00000452 EMPC J (0.00000268)	U (0.00000179)	0.00000444 EMPC J (0.00000131)	0.0000053 EMPC J (0.0000021)	U (0.0000421)	---
PCB-020 (2,3,3'-TrCB)	UB (0.000000505)	UB (0.000000424)	UB (0.000000627)	UB (0.000000471)	UB (0.00000082)	0.00000944 B (0.0000421)	---
PCB-021 (2,3,4-TrCB)	UB (0.000000506)	UB (0.000000425)	UB (0.000000629)	UB (0.000000472)	UB (0.00000082)	0.00000434 B (0.0000421)	---
PCB-022 (2,3,4'-TrCB)	0.00000474 J (0.000000514)	UB (0.000000432)	UB (0.000000639)	UB (0.00000048)	UB (0.00000083)	0.00000396 B (0.0000421)	---
PCB-023 (2,3,5-TrCB)	U (0.000000524)	U (0.000000441)	U (0.000000652)	UB (0.000000489)	U (0.00000085)	U (0.0000421)	---
PCB-024 (2,3,6-TrCB)	U (0.000000709)	U (0.00000183)	U (0.00000123)	0.00000364 J (0.000000897)	U (0.0000014)	---	---
PCB-025 (2,3',4-TrCB)	U (0.000000468)	UB (0.000000393)	000000757 EMPC J (0.000000581)	UB (0.000000436)	U (0.00000076)	U (0.0000421)	---
PCB-026 (2,3',5-TrCB)	0.00000207 JQ (0.000000496)	UB (0.000000417)	UB (0.000000617)	UB (0.000000463)	U (0.00000081)	0.0000015 B (0.0000421)	---
PCB-027 (2,3',6-TrCB)	0.00000138 J (0.000000611)	U (0.00000158)	U (0.00000106)	0.00000331 J (0.000000774)	U (0.0000012)	U (0.0000421)	---
PCB-028 (2,4,4'-TrCB)	UB (0.000000505)	UB (0.000000424)	UB (0.000000627)	UB (0.000000471)	UB (0.00000082)	0.00000944 B (0.0000421)	---
PCB-030 (2,4,6-TrCB)	0.000014 J (0.000000749)	UB (0.00000194)	UB (0.0000013)	UB (0.000000948)	UB (0.0000015)	0.00000624 EMPC J (0.0000632)	---
PCB-029 (2,4,5-TrCB)	0.00000207 JQ (0.000000496)	0.00000185 BJQ (0.000000417)	0.00000224 J (0.000000617)	0.00000721 BJ (0.000000463)	U (0.00000081)	0.0000015 B (0.0000421)	---
PCB-031 (2,4',5-TrCB)	0.0000111 BJ (0.000000493)	0.0000105 BJ (0.000000414)	0.00000925 BJ (0.000000612)	0.0000127 BJ (0.00000046)	0.0000072 BJ (0.0000008)	0.00000811 B (0.0000421)	---
PCB-032 (2,4',6-TrCB)	0.00000554 JQ (0.000000599)	0.00000653 J (0.00000155)	0.00000476 J (0.00000104)	UB (0.000000759)	UB (0.0000012)	0.00000375 EMPC J (0.0000421)	---
PCB-033 (2,3',4'-TrCB)	UB (0.000000506)	UB (0.000000425)	UB (0.000000629)	UB (0.000000472)	UB (0.00000082)	0.00000434 B (0.0000421)	---
PCB-034 (2,3',5'-TrCB)	U (0.000000516)	U (0.000000434)	U (0.000000642)	UB (0.000000482)	U (0.00000084)	U (0.0000421)	---
PCB-035 (3,3',4-TrCB)	U (0.000000531)	U (0.000000446)	).00000143 EMPC J (0.000000659)	UB (0.000000495)	U (0.00000086)	U (0.0000421)	---
PCB-036 (3,3',5-TrCB)	U (0.000000513)	U (0.000000431)	U (0.000000637)	UB (0.000000478)	U (0.00000083)	U (0.0000421)	---
PCB-037 (3,4,4'-TrCB)	0.00000285 J (0.000000526)	UB (0.000000442)	UB (0.000000654)	UB (0.000000491)	UB (0.00000085)	0.00000287 B (0.0000421)	---
PCB-038 (3,4,5-TrCB)	U (0.000000541)	U (0.000000454)	U (0.000000672)	UB (0.000000505)	U (0.00000088)	U (0.0000421)	---
PCB-039 (3,4',5-TrCB)	U (0.000000481)	U (0.000000404)	U (0.000000597)	UB (0.000000449)	U (0.00000078)	U (0.0000421)	---
PCB Aroclors							
PCBs (total)	U (0.00299)	U (0.00296)	U (0.00299)	U (0.00299)	U (0.0028)	U (0.51)	U (0.01)
Aroclor-1016	U (0.00257)	U (0.00254)	U (0.00257)	U (0.00257)	U (0.0024)	U (0.51)	U (0.01)
Aroclor-1242	U (0.00189)	U (0.00188)	U (0.00189)	U (0.00189)	U (0.0018)	U (0.51)	U (0.01)
Aroclor-1248	U (0.00232)	U (0.0023)	U (0.00232)	U (0.00232)	U (0.0022)	U (0.51)	U (0.01)
Aroclor-1260	U (0.00138)	U (0.00137)	U (0.00138)	U (0.00138)	U (0.0013)	U (0.51)	U (0.01)
Aroclor-1268	U (0.00277)	U (0.00274)	U (0.00277)	U (0.00277)	U (0.0026)	U (0.51)	U (0.01)
CDDF							
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	U (0.00000187)	---	U (0.00000062)	---	UB (0.00000039)	---	---
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	U (0.00000148)	---	U (0.000000494)	---	U (0.00000037)	---	---
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	U (0.00000231)	---	UB (0.000000737)	---	UB (0.00000054)	---	---
Octachlorodibenzo-p-dioxin	0.00000629 J (0.0000021)	---	UB (0.000000719)	---	UB (0.00000098)	---	---
2,3,7,8-Tetrachlorodibenzo-p-dioxin	U (0.00000494)	---	U (0.000000227)	---	U (0.00000029)	---	---
1,2,3,7,8-Pentachlorodibenzofuran	U (0.00000157)	---	UB (0.000000302)	---	0.00000042 EMPC J (0.00000038)	---	---
1,2,3,4,7,8-Hexachlorodibenzofuran	U (0.00000116)	---	U (0.000000481)	---	UB (0.0000003)	---	---
1,2,3,4,6,7,8-Heptachlorodibenzofuran	U (0.0000015)	---	UB (0.000000202)	---	UB (0.00000041)	---	---
Octachlorodibenzofuran	U (0.00000266)	---	0.00000717 BJ (0.000000577)	---	0.000002 BJQ (0.00000058)	---	---

Notes:
1 All concentrations are presented in ug/L (ppb).
2 Only compounds with at least one detection are shown.

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02
ENVIRON Sample ID	MB-MW-01-20121017	MB-MW-01-20130410	MB-MW-01-20131009	MB-MW-02-20100726	MB-MW-02-20101018	MB-MW-02-20110110	MB-MW-02-20110411
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	10/17/2012	4/10/2013	10/9/2013	7/26/2010	10/18/2010	1/10/2011	4/11/2011
Comments							
SVOC							
Acenaphthene	1.8 J (2.4)	2.2 (2)	1.4 J (1.9)	3.48 (0.153)	---	2.92 J (0.158)	---
Acenaphthylene	U (2.4)	U (2)	U (1.9)	U (0.161)	---	UJ (0.167)	---
Acetophenone	U (12)	U (10)	U (9.6)	U (0.848)	---	UJ (0.88)	---
Anthracene	U (2.4)	0.22 J (2)	0.35 J (1.9)	1.31 J (0.163)	---	0.495 J (0.169)	---
Benzaldehyde	U (12)	7.8 J (10)	U (9.6)	U (1.59)	---	UJ (1.65)	---
Benzo(a)anthracene	U (2.4)	U (2)	U (1.9)	U (0.156)	---	UJ (0.162)	---
Benzo(a)pyrene	U (2.4)	U (2)	U (1.9)	U (0.142)	---	UJ (0.147)	---
Benzo(b)fluoranthene	U (2.4)	U (2)	U (1.9)	U (0.166)	---	UJ (0.173)	---
Benzo(g,h,i)perylene	U (2.4)	U (2)	U (1.9)	U (0.16)	---	UJ (0.166)	---
Benzo(k)fluoranthene	U (2.4)	U (2)	U (1.9)	U (0.58)	---	U (0.602)	---
Biphenyl	U (12)	U (10)	U (9.6)	U (0.44)	---	UJ (0.456)	---
bis(2-Chloroethyl) ether	U (2.4)	U (2)	U (1.9)	U (0.266)	---	UJ (0.276)	---
bis(2-Ethylhexyl)phthalate	U (24)	U (20)	U (19)	U (13.3)	---	UJ (13.8)	---
Butylbenzylphthalate	U (12)	U (10)	U (9.6)	UL (1.51)	---	UJ (1.57)	---
Caprolactam	U (59)	U (51)	U (48)	35.4 J (12.6)	---	UJ (13.1)	---
Carbazole	1.4 J (2.4)	U (2)	0.85 J (1.9)	3.02 (0.167)	---	UJ (0.174)	---
4-Chloroaniline	U (12)	U (10)	U (9.6)	U (0.938)	---	UJ (0.974)	---
2-Chlorophenol	U (12)	U (10)	U (9.6)	U (1.75)	---	UJ (1.82)	---
4-Chlorophenyl-phenyl ether	U (12)	U (10)	U (9.6)	U (0.533)	---	UJ (0.553)	---
Chrysene	U (2.4)	U (2)	U (1.9)	U (0.148)	---	U (0.154)	---
Dibenz(a,h)anthracene	U (2.4)	U (2)	U (1.9)	U (0.164)	---	UJ (0.17)	---
Dibenzofuran	U (12)	U (10)	U (9.6)	2.18 J (0.654)	---	1.36 J (0.679)	---
2,4-Dichlorophenol	U (2.4)	U (2)	U (1.9)	U (0.354)	---	UJ (0.367)	---
Diethylphthalate	U (12)	U (10)	U (9.6)	34 (1.55)	---	UJ (1.61)	---
2,4-Dimethylphenol	U (12)	U (10)	U (9.6)	655 (9.03)	---	75.3 J (0.937)	---
Dimethylphthalate	U (12)	U (10)	U (9.6)	U (0.811)	---	UJ (0.842)	---
Di-n-butylphthalate	U (12)	U (10)	U (9.6)	U (1.32)	---	UJ (1.37)	---
Di-n-octylphthalate	U (12)	U (10)	U (9.6)	U (2.19)	---	UJ (2.27)	---
Fluoranthene	U (2.4)	U (2)	U (1.9)	U (0.172)	---	0.698 J (0.178)	---
Fluorene	0.6 J (2.4)	0.72 J (2)	0.51 J (1.9)	1.95 J (0.229)	---	1.2 J (0.238)	---
Indeno(1,2,3-cd)pyrene	U (2.4)	U (2)	U (1.9)	U (0.211)	---	UJ (0.219)	---
Isophorone	U (12)	U (10)	U (9.6)	U (0.683)	---	UJ (0.708)	---
2-Methylnaphthalene	0.41 J (2.4)	0.42 J (2)	0.28 J (1.9)	14 (0.129)	---	6.57 J (0.134)	---
2-Methylphenol	U (12)	U (10)	U (9.6)	64.3 (0.914)	---	1.63 J (0.948)	---
3&4-Methylphenol	U (12)	U (10)	U (9.6)	---	---	---	---
4-Methylphenol	---	---	---	2.96 J (0.956)	---	UJ (0.992)	---
Naphthalene	66 (2.4)	71 (2)	23 (1.9)	823 (1.48)	---	292 J (0.154)	---
N-Nitrosodiphenylamine	1.9 J (12)	U (10)	U (9.6)	U (0.904)	---	UJ (0.938)	---
Pentachlorophenol	U (12)	U (10)	U (9.6)	U (0.703)	---	UJ (0.729)	---
Phenanthrene	U (2.4)	0.54 J (2)	0.42 J (1.9)	3.45 (0.453)	---	2.29 (0.47)	---
Phenol	U (2.4)	U (2)	U (1.9)	1.47 J (0.616)	---	UJ (0.639)	---
Pyrene	U (2.4)	U (2)	U (1.9)	0.734 J (0.166)	---	0.342 J (0.173)	---
PCB Congeners							
13C12-PCB 114	---	---	---	---	---	---	---
PCB-001 (2-CB)	---	---	---	0.000866 (0.000001)	0.000364 B (0.00000142)	0.000347 B (0.000000413)	0.000169 (0.000000404)
PCB-002 (3-CB)	---	---	---	0.0000241 J (0.00000112)	0.0000156 J (0.00000167)	0.0000152 J (0.000000431)	UB (0.0000004)
PCB-003 (4-CB)	---	---	---	0.0000172 J (0.00000125)	U (0.00000199)	0.0000577 (0.000000448)	UB (0.000000395)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02
ENVIRON Sample ID	MB-MW-01-20121017	MB-MW-01-20130410	MB-MW-01-20131009	MB-MW-02-20100726	MB-MW-02-20101018	MB-MW-02-20110110	MB-MW-02-20110411
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	10/17/2012	4/10/2013	10/9/2013	7/26/2010	10/18/2010	1/10/2011	4/11/2011
Comments							
PCB-209 (DeCB)	---	---	---	0.0000308 J (0.000000949)	0.0000801 EMPC J (0.00000418)	0.0000706 (0.000001)	0.0000461 (0.000000673)
PCB-004 (2,2'-DiCB)	---	---	---	0.0104 B (0.00000605)	0.00699 B (0.0000149)	0.00232 (0.00000237)	0.00177 B (0.00000224)
PCB-005 (2,3-DiCB)	---	---	---	0.00000813 JQ (0.00000464)	0.00000485 EMPC J (0.00000944)	0.0000021 EMPC J (0.00000172)	UB (0.00000153)
PCB-006 (2,3'-DiCB)	---	---	---	0.000469 (0.00000437)	0.000285 EMPC (0.00000888)	0.0000871 (0.00000161)	0.0000542 B (0.00000144)
PCB-007 (2,4-DiCB)	---	---	---	0.0000342 JQ (0.00000449)	UB (0.00000913)	0.00000691 EMPC J (0.00000166)	UB (0.00000147)
PCB-008 (2,4'-DiCB)	---	---	---	0.000343 B (0.00000427)	UB (0.00000869)	0.00019 B (0.00000158)	0.0000572 BJ (0.0000014)
PCB-009 (2,5-DiCB)	---	---	---	0.0000793 (0.00000451)	0.0000415 EMPC J (0.00000917)	0.0000133 EMPC J (0.00000167)	0.0000104 EMPC J (0.00000148)
PCB-010 (2,6-DiCB)	---	---	---	0.000127 Q (0.00000485)	0.0000946 EMPC J (0.00000986)	0.0000336 J (0.00000179)	0.0000288 J (0.00000159)
PCB-011 (3,3'-DiCB)	---	---	---	UB (0.0000043)	UB (0.00000873)	UB (0.00000159)	UB (0.00000141)
PCB-012 (3,4-DiCB)	---	---	---	0.0000193 JQ (0.0000044)	UB (0.00000895)	0.0000312 EMPC J (0.00000163)	UB (0.00000145)
PCB-013 (3,4'-DiCB)	---	---	---	0.0000193 JQ (0.0000044)	UB (0.00000895)	0.0000312 EMPC J (0.00000163)	UB (0.00000145)
PCB-014 (3,5-DiCB)	---	---	---	U (0.0000038)	U (0.00000772)	U (0.0000014)	UB (0.00000125)
PCB-015 (4,4'-DiCB)	---	---	---	0.0000152 JQ (0.0000045)	UB (0.00000807)	0.000157 B (0.00000159)	UB (0.00000136)
PCB-170 (2,2',3,3',4,4',5-HpCB)	---	---	---	0.0000523 (0.00000211)	0.000135 J (0.0000061)	0.0000732 (0.00000127)	UB (0.00000145)
PCB-171 (2,2',3,3',4,4',6-HpCB)	---	---	---	0.0000155 J (0.00000191)	0.0000408 J (0.00000586)	0.0000203 J (0.00000118)	UB (0.00000139)
PCB-172 (2,2',3,3',4,5,5'-HpCB)	---	---	---	0.00000727 J (0.00000189)	0.0000182 EMPC J (0.0000058)	0.00000859 J (0.00000117)	UB (0.00000138)
PCB-173 (2,2',3,3',4,5,6-HpCB)	---	---	---	0.0000155 J (0.00000191)	0.0000408 J (0.00000586)	0.0000203 J (0.00000118)	UB (0.00000139)
PCB-174 (2,2',3,3',4,5,6'-HpCB)	---	---	---	0.0000463 (0.00000177)	0.000137 J (0.00000543)	0.0000755 (0.0000011)	UB (0.00000129)
PCB-175 (2,2',3,3',4,5',6-HpCB)	---	---	---	U (0.0000017)	U (0.00000522)	U (0.00000105)	UB (0.00000124)
PCB-177 (2,2',3,3',4,5',6'-HpCB)	---	---	---	0.0000221 JQ (0.00000181)	0.000065 EMPC J (0.00000557)	0.0000371 J (0.00000112)	UB (0.00000132)
PCB-176 (2,2',3,3',4,6,6'-HpCB)	---	---	---	0.00000639 JQ (0.0000013)	0.0000146 J (0.00000398)	0.00000764 J (0.000000802)	UB (0.000000942)
PCB-178 (2,2',3,3',5,5',6-HpCB)	---	---	---	0.0000103 J (0.00000184)	0.0000278 EMPC J (0.00000564)	0.0000139 J (0.00000114)	UB (0.00000134)
PCB-179 (2,2',3,3',5,6,6'-HpCB)	---	---	---	0.0000232 J (0.00000137)	0.0000683 J (0.00000419)	0.000018 J (0.000000846)	UB (0.000000994)
PCB-180 (2,2',3,4,4',5,5'-HpCB)	---	---	---	0.0000912 (0.00000144)	0.000249 B (0.00000443)	0.00016 (0.000000894)	UB (0.00000105)
PCB-181 (2,2',3,4,4',5,6-HpCB)	---	---	---	U (0.0000017)	U (0.00000521)	U (0.00000105)	0.00000258 EMPC J (0.00000124)
PCB-182 (2,2',3,4,4',5,6'-HpCB)	---	---	---	U (0.00000165)	U (0.00000507)	U (0.00000102)	U (0.0000012)
PCB-183 (2,2',3,4,4',5',6-HpCB)	---	---	---	0.0000328 J (0.00000169)	UB (0.00000518)	0.0000502 (0.00000105)	UB (0.00000123)
PCB-185 (2,2',3,4,5,5',6-HpCB)	---	---	---	0.0000328 J (0.00000169)	0.0000871 J (0.00000518)	0.0000502 (0.00000105)	0.0000768 (0.00000123)
PCB-187 (2,2',3,4',5,5',6-HpCB)	---	---	---	0.0000861 (0.00000158)	0.000222 B (0.00000485)	0.000115 (0.000000979)	UB (0.00000115)
PCB-188 (2,2',3,4',5,6,6'-HpCB)	---	---	---	U (0.00000117)	U (0.00000371)	U (0.000000735)	U (0.00000088)
PCB-189 (2,3,3',4,4',5,5'-HpCB)	---	---	---	U (0.00000118)	0.00000505 EMPC J (0.00000241)	0.00000144 EMPC J (0.000000616)	0.00000341 J (0.000000699)
PCB-190 (2,3,3',4,4',5,6-HpCB)	---	---	---	0.000012 J (0.00000132)	0.0000184 J (0.00000404)	0.00000441 EMPC J (0.000000816)	UB (0.000000958)
PCB-191 (2,3,3',4,4',5',6-HpCB)	---	---	---	U (0.00000129)	U (0.00000397)	0.00000241 EMPC J (0.000000802)	UB (0.000000942)
PCB-193 (2,3,3',4',5,5',6-HpCB)	---	---	---	0.0000912 (0.00000144)	0.000249 B (0.00000443)	0.00016 (0.000000894)	UB (0.00000105)
PCB-128 (2,2',3,3',4,4'-HxCB)	---	---	---	0.0000717 (0.0000021)	0.000157 J (0.00000503)	0.0000571 (0.00000143)	0.0000843 (0.0000012)
PCB-129 (2,2',3,3',4,5-HxCB)	---	---	---	0.000478 B (0.00000217)	0.000947 B (0.0000052)	0.000425 B (0.00000148)	0.000575 B (0.00000124)
PCB-130 (2,2',3,3',4,5'-HxCB)	---	---	---	0.0000286 J (0.00000281)	0.0000799 J (0.00000671)	0.0000212 J (0.00000191)	0.0000339 J (0.0000016)
PCB-131 (2,2',3,3',4,6-HxCB)	---	---	---	0.00000653 J (0.00000288)	0.0000212 J (0.00000688)	0.00000465 EMPC J (0.00000195)	0.00000834 EMPC J (0.00000164)
PCB-132 (2,2',3,3',4,6'-HxCB)	---	---	---	0.000193 (0.00000274)	0.00039 (0.00000654)	0.000151 (0.00000186)	0.000211 (0.00000156)
PCB-133 (2,2',3,3',5,5'-HxCB)	---	---	---	0.00000774 J (0.00000264)	0.0000183 JQ (0.00000631)	0.00000531 J (0.00000179)	0.0000105 J (0.0000015)
PCB-134 (2,2',3,3',5,6-HxCB)	---	---	---	0.0000434 (0.00000281)	0.0000863 EMPC J (0.00000672)	0.0000251 J (0.00000191)	0.0000455 (0.0000016)
PCB-135 (2,2',3,3',5,6'-HxCB)	---	---	---	0.000187 (0.00000284)	0.000327 (0.00000931)	0.000106 (0.00000157)	0.000201 (0.00000165)
PCB-136 (2,2',3,3',6,6'-HxCB)	---	---	---	0.0000859 (0.00000208)	0.000171 J (0.00000683)	0.0000409 J (0.00000116)	0.0000986 (0.00000121)
PCB-137 (2,2',3,4,4',5-HxCB)	---	---	---	0.0000224 J (0.00000242)	0.0000578 J (0.00000579)	0.0000169 J (0.00000164)	0.0000276 J (0.00000138)
PCB-138 (2,2',3,4,4',5'-HxCB)	---	---	---	0.000478 B (0.00000217)	0.000947 B (0.0000052)	0.000425 B (0.00000148)	0.000575 B (0.00000124)
PCB-139 (2,2',3,4,4',6-HxCB)	---	---	---	0.00000958 J (0.00000241)	0.0000236 J (0.00000576)	0.00000663 J (0.00000164)	0.0000134 J (0.00000137)
PCB-140 (2,2',3,4,4',6'-HxCB)	---	---	---	0.00000958 J (0.00000241)	0.0000236 J (0.00000576)	0.00000663 J (0.00000164)	0.0000134 J (0.00000137)
PCB-141 (2,2',3,4,5,5'-HxCB)	---	---	---	0.0000736 (0.00000251)	0.000153 BJ (0.00000599)	0.000076 (0.0000017)	0.0000938 (0.00000143)
PCB-143 (2,2',3,4,5,6'-HxCB)	---	---	---	0.0000434 (0.00000281)	0.0000863 EMPC J (0.00000672)	0.0000251 J (0.00000191)	0.0000455 (0.0000016)
PCB-144 (2,2',3,4,5',6-HxCB)	---	---	---	0.000016 JQ (0.00000263)	0.0000248 EMPC J (0.00000864)	0.0000115 J (0.00000146)	0.0000207 J (0.00000153)
PCB-146 (2,2',3,4',5,5'-HxCB)	---	---	---	0.0000599 (0.00000229)	0.000133 J (0.00000547)	0.0000513 (0.00000155)	0.0000729 (0.0000013)
PCB-147 (2,2',3,4',5,6-HxCB)	---	---	---	0.00041 B (0.00000234)	0.000759 B (0.00000559)	0.000333 (0.00000159)	0.00046 B (0.00000133)
PCB-148 (2,2',3,4',5,6'-HxCB)	---	---	---	U (0.00000278)	U (0.00000914)	U (0.00000155)	U (0.00000162)
PCB-149 (2,2',3,4',5',6-HxCB)	---	---	---	0.00041 B (0.00000234)	0.000759 B (0.00000559)	0.000333 (0.00000159)	0.00046 B (0.00000133)
PCB-150 (2,2',3,4',6,6'-HxCB)	---	---	---	U (0.00000194)	U (0.00000637)	U (0.00000108)	U (0.00000113)
PCB-151 (2,2',3,5,5',6-HxCB)	---	---	---	0.000187 (0.00000284)	0.000327 (0.00000931)	0.000106 (0.00000157)	0.000201 (0.00000165)
PCB-152 (2,2',3,5,6,6'-HxCB)	---	---	---	U (0.00000198)	U (0.00000649)	U (0.0000011)	0.00000225 J (0.00000115)
PCB-153 (2,2',4,4',5,5'-HxCB)	---	---	---	0.000308 B (0.00000188)	0.000623 B (0.00000449)	0.000316 (0.00000128)	0.000413 B (0.00000107)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02
ENVIRON Sample ID	MB-MW-01-20121017	MB-MW-01-20130410	MB-MW-01-20131009	MB-MW-02-20100726	MB-MW-02-20101018	MB-MW-02-20110110	MB-MW-02-20110411
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	10/17/2012	4/10/2013	10/9/2013	7/26/2010	10/18/2010	1/10/2011	4/11/2011
Comments							
PCB-154 (2,2',4,4',5,6'-HxCB)	---	---	---	U (0.00000231)	0.0000139 EMPC J (0.00000757)	0.00000247 EMPC J (0.00000128)	0.00000886 J (0.00000134)
PCB-155 (2,2',4,4',6,6'-HxCB)	---	---	---	U (0.00000189)	U (0.00000619)	U (0.00000105)	U (0.0000011)
PCB-156 (2,3,3',4,4',5-HxCB)	---	---	---	0.0000455 (0.0000022)	0.000121 J (0.00000534)	0.0000283 JS (0.00000199)	0.0000608 (0.00000129)
PCB-157 (2,3,3',4,4',5'-HxCB)	---	---	---	0.0000455 (0.0000022)	0.000121 J (0.00000534)	0.0000283 J (0.00000199)	0.0000608 (0.00000129)
PCB-158 (2,3,3',4,4',6-HxCB)	---	---	---	0.000041 (0.00000172)	0.0000964 BJ (0.0000041)	0.0000399 J (0.00000117)	0.0000503 (0.000000977)
PCB-159 (2,3,3',4,5,5'-HxCB)	---	---	---	U (0.00000184)	U (0.0000044)	0.00000273 EMPC J (0.00000125)	UB (0.00000105)
PCB-160 (2,3,3',4,5,6-HxCB)	---	---	---	0.000478 B (0.00000217)	0.000947 B (0.0000052)	0.000425 B (0.00000148)	0.000575 B (0.00000124)
PCB-162 (2,3,3',4',5,5'-HxCB)	---	---	---	U (0.00000182)	U (0.00000434)	U (0.00000123)	UB (0.00000104)
PCB-163 (2,3,3',4',5,6-HxCB)	---	---	---	0.000478 B (0.00000217)	0.000947 B (0.0000052)	0.000425 B (0.00000148)	0.000575 B (0.00000124)
PCB-164 (2,3,3',4',5',6-HxCB)	---	---	---	0.0000347 J (0.00000192)	0.000082 J (0.00000458)	0.0000266 J (0.0000013)	0.0000412 J (0.00000109)
PCB-166 (2,3,4,4',5,6-HxCB)	---	---	---	0.0000717 (0.0000021)	0.000157 J (0.00000503)	0.0000571 (0.00000143)	0.0000843 (0.0000012)
PCB-167 (2,3',4,4',5,5'-HxCB)	---	---	---	0.0000131 J (0.00000139)	0.0000332 J (0.00000325)	0.00000805 J (0.000000769)	0.0000174 J (0.000000839)
PCB-168 (2,3',4,4',5',6-HxCB)	---	---	---	0.000308 B (0.00000188)	0.000623 B (0.00000449)	0.000316 (0.00000128)	0.000413 B (0.00000107)
PCB-169 (3,3',4,4',5,5'-HxCB)	---	---	---	U (0.00000149)	U (0.00000356)	U (0.000000916)	U (0.000000761)
PCB-206 (2,2',3,3',4,4',5,5',6-NoCB)	---	---	---	0.000139 (0.0000013)	0.000397 L (0.00000415)	0.000308 (0.00000128)	0.000176 (0.00000149)
PCB-207 (2,2',3,3',4,4',5,6,6'-NoCB)	---	---	---	0.0000106 J (0.000000945)	0.0000404 J (0.00000303)	0.0000202 J (0.00000086)	0.0000165 J (0.00000107)
PCB-208 (2,2',3,3',4,5,5',6,6'-NoCB)	---	---	---	0.0000586 (0.000000999)	0.000155 EMPC J (0.00000321)	0.000112 (0.000000862)	0.0000708 (0.00000112)
PCB-194 (2,2',3,3',4,4',5,5'-OcCB)	---	---	---	0.0000286 J (0.00000106)	0.0000988 J (0.0000032)	0.0000759 (0.000000982)	0.0000514 (0.000000755)
PCB-195 (2,2',3,3',4,4',5,6-OcCB)	---	---	---	0.00000339 JQ (0.00000115)	0.0000182 J (0.00000348)	0.0000129 J (0.00000107)	UB (0.000000819)
PCB-196 (2,2',3,3',4,4',5,6'-OcCB)	---	---	---	0.0000145 J (0.0000014)	0.0000423 J (0.00000611)	0.0000265 J (0.00000106)	UB (0.00000109)
PCB-197 (2,2',3,3',4,4',6,6'-OcCB)	---	---	---	U (0.00000104)	U (0.00000455)	0.00000717 EMPC J (0.000000792)	UB (0.000000813)
PCB-198 (2,2',3,3',4,5,5',6-OcCB)	---	---	---	0.00012 (0.00000144)	0.000267 (0.00000631)	0.0000336 EMPC J (0.0000011)	0.000148 (0.00000113)
PCB-199 (2,2',3,3',4,5,5',6'-OcCB)	---	---	---	0.00012 (0.00000144)	0.000267 (0.00000631)	0.0000336 J (0.0000011)	0.000148 (0.00000113)
PCB-200 (2,2',3,3',4,5,6,6'-OcCB)	---	---	---	0.0000055 JQ (0.00000102)	0.0000169 EMPC J (0.00000447)	U (0.000000778)	UB (0.000000798)
PCB-201 (2,2',3,3',4,5',6,6'-OcCB)	---	---	---	0.0000083 J (0.000000986)	0.0000174 EMPC J (0.00000431)	0.0000132 J (0.000000751)	UB (0.000000771)
PCB-202 (2,2',3,3',5,5',6,6'-OcCB)	---	---	---	0.000039 J (0.00000111)	0.000103 J (0.00000486)	0.0000527 (0.000000846)	0.0000384 J (0.000000868)
PCB-203 (2,2',3,4,4',5,5',6-OcCB)	---	---	---	0.0000787 (0.00000129)	0.000197 J (0.00000564)	0.000115 (0.000000981)	0.0000932 (0.00000101)
PCB-204 (2,2',3,4,4',5,6,6'-OcCB)	---	---	---	U (0.00000108)	U (0.00000473)	U (0.000000823)	U (0.000000845)
PCB-205 (2,3,3',4,4',5,5',6-OcCB)	---	---	---	U (0.000000891)	U (0.0000027)	U (0.000000827)	UB (0.000000636)
PCB-24/27	---	---	---	---	---	---	---
PCB-42/59	---	---	---	---	---	---	---
PCB-52/69	---	---	---	---	---	---	---
PCB-61/70	---	---	---	---	---	---	---
PCB-90/101	---	---	---	---	---	---	---
PCB-107/109	---	---	---	---	---	---	---
PCB-132/161	---	---	---	---	---	---	---
PCB-133/142	---	---	---	---	---	---	---
PCB-138/163/164	---	---	---	---	---	---	---
PCB-196/203	---	---	---	---	---	---	---
PCB-082 (2,2',3,3',4-PeCB)	---	---	---	0.0000723 (0.00000329)	0.000168 J (0.0000106)	0.0000243 J (0.00000146)	0.0000411 EMPC J (0.00000179)
PCB-083 (2,2',3,3',5-PeCB)	---	---	---	0.000463 (0.00000277)	0.000966 B (0.00000891)	0.000148 (0.00000123)	0.000349 (0.00000151)
PCB-084 (2,2',3,3',6-PeCB)	---	---	---	0.000348 (0.00000315)	0.000608 (0.0000101)	0.0000877 (0.0000014)	0.000185 (0.00000171)
PCB-085 (2,2',3,4,4'-PeCB)	---	---	---	0.000094 (0.00000228)	0.000221 (0.00000734)	0.0000361 J (0.00000101)	0.0000871 (0.00000124)
PCB-086 (2,2',3,4,5-PeCB)	---	---	---	0.000439 B (0.00000233)	0.000934 EMPC (0.0000075)	0.000166 (0.00000103)	0.00033 B (0.00000127)
PCB-087 (2,2',3,4,5'-PeCB)	---	---	---	0.000439 B (0.00000233)	0.000934 Q (0.0000075)	0.000166 (0.00000103)	0.00033 B (0.00000127)
PCB-088 (2,2',3,4,6-PeCB)	---	---	---	0.000286 (0.0000028)	0.000496 (0.00000903)	0.0000512 (0.00000124)	0.00015 (0.00000153)
PCB-089 (2,2',3,4,6'-PeCB)	---	---	---	0.00000635 J (0.00000304)	U (0.0000098)	0.000003 J (0.00000135)	U (0.00000166)
PCB-090 (2,2',3,4',5-PeCB)	---	---	---	0.00081 B (0.00000237)	0.00152 B (0.00000764)	0.000278 B (0.00000105)	0.000588 B (0.00000129)
PCB-097 (2,2',3,4',5'-PeCB)	---	---	---	0.000439 B (0.00000233)	0.000934 EMPC (0.0000075)	0.000166 (0.00000103)	0.00033 B (0.00000127)
PCB-091 (2,2',3,4',6-PeCB)	---	---	---	0.000286 (0.0000028)	0.000496 (0.00000903)	0.0000512 (0.00000124)	0.00015 (0.00000153)
PCB-098 (2,2',3,4',6'-PeCB)	---	---	---	0.0000496 (0.00000262)	0.0000944 J (0.00000844)	0.00000646 EMPC J (0.00000116)	0.0000231 J (0.00000143)
PCB-092 (2,2',3,5,5'-PeCB)	---	---	---	0.00026 (0.00000269)	0.000469 (0.00000867)	0.000061 (0.00000119)	0.000172 (0.00000147)
PCB-093 (2,2',3,5,6-PeCB)	---	---	---	U (0.0000027)	0.0000498 EMPC J (0.0000087)	0.00000221 J (0.0000012)	0.0000195 BJ (0.00000147)
PCB-094 (2,2',3,5,6'-PeCB)	---	---	---	0.0000339 J (0.00000304)	0.0000611 J (0.0000098)	0.00000461 J (0.00000135)	0.0000195 J (0.00000166)
PCB-095 (2,2',3,5',6-PeCB)	---	---	---	0.00114 (0.00000287)	0.00181 B (0.00000922)	0.000306 (0.00000127)	0.000541 (0.00000156)
PCB-096 (2,2',3,6,6'-PeCB)	---	---	---	0.0000285 J (0.00000228)	0.0000387 EMPC J (0.00000733)	0.00000276 EMPC J (0.00000101)	0.0000117 EMPC J (0.00000124)
PCB-099 (2,2',4,4',5-PeCB)	---	---	---	0.000463 (0.00000277)	0.000966 B (0.00000891)	0.000148 (0.00000123)	0.000349 (0.00000151)
PCB-100 (2,2',4,4',6-PeCB)	---	---	---	U (0.0000027)	0.0000498 EMPC J (0.0000087)	0.00000221 J (0.0000012)	0.0000195 BJ (0.00000147)
PCB-101 (2,2',4,5,5'-PeCB)	---	---	---	0.00081 B (0.00000237)	0.00152 B (0.00000764)	0.000278 B (0.00000105)	0.000588 B (0.00000129)
PCB-102 (2,2',4,5,6'-PeCB)	---	---	---	0.0000496 (0.00000262)	0.0000944 J (0.00000844)	0.00000646 JQ (0.00000116)	0.0000231 J (0.00000143)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02
ENVIRON Sample ID	MB-MW-01-20121017	MB-MW-01-20130410	MB-MW-01-20131009	MB-MW-02-20100726	MB-MW-02-20101018	MB-MW-02-20110110	MB-MW-02-20110411
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	10/17/2012	4/10/2013	10/9/2013	7/26/2010	10/18/2010	1/10/2011	4/11/2011
Comments							
PCB-103 (2,2',4,5',6-PeCB)	---	---	---	0.0000236 JQ (0.00000267)	0.0000557 EMPC J (0.00000859)	0.00000359 EMPC J (0.00000118)	0.0000144 EMPC J (0.00000145)
PCB-104 (2,2',4,6,6'-PeCB)	---	---	---	U (0.00000203)	U (0.00000653)	U (0.0000009)	U (0.00000111)
PCB-105 (2,3,3',4,4'-PeCB)	---	---	---	0.000105 (0.00000163)	0.000201 BJ (0.00000326)	0.0000613 (0.000000705)	0.000101 B (0.000000762)
PCB-108 (2,3,3',4,5'-PeCB)	---	---	---	0.0000138 J (0.00000177)	0.0000277 EMPC J (0.00000339)	0.00000499 EMPC J (0.000000749)	0.0000168 BJ (0.000000856)
PCB-109 (2,3,3',4,6-PeCB)	---	---	---	0.000439 B (0.00000233)	0.000934 EMPC (0.0000075)	0.000166 (0.00000103)	0.00033 B (0.00000127)
PCB-107 (2,3,3',4',5-PeCB)	---	---	---	0.000043 (0.00000168)	0.0000779 J (0.00000323)	0.0000158 J (0.000000713)	0.0000392 BJ (0.000000814)
PCB-110 (2,3,3',4',6-PeCB)	---	---	---	0.000942 B (0.00000201)	0.00176 B (0.00000648)	0.000328 B (0.000000893)	0.000672 (0.0000011)
PCB-111 (2,3,3',5,5'-PeCB)	---	---	---	U (0.00000191)	U (0.00000614)	U (0.000000846)	U (0.00000104)
PCB-113 (2,3,3',5',6-PeCB)	---	---	---	0.00081 B (0.00000237)	0.00152 B (0.00000764)	0.000278 B (0.00000105)	0.000588 B (0.00000129)
PCB-114 (2,3,4,4',5-PeCB)	---	---	---	0.00000487 JQ (0.0000016)	0.000011 EMPC J (0.00000304)	0.00000259 EMPC J (0.000000659)	UB (0.000000793)
PCB-115 (2,3,4,4',6-PeCB)	---	---	---	0.000942 B (0.00000201)	0.00176 B (0.00000648)	0.000328 B (0.000000893)	0.000672 (0.0000011)
PCB-116 (2,3,4,5,6-PeCB)	---	---	---	0.000094 (0.00000228)	0.000221 (0.00000734)	0.0000361 J (0.00000101)	0.0000871 (0.00000124)
PCB-117 (2,3,4',5,6-PeCB)	---	---	---	0.000094 (0.00000228)	0.000221 (0.00000734)	0.0000361 J (0.00000101)	0.0000871 (0.00000124)
PCB-118 (2,3',4,4',5-PeCB)	---	---	---	0.000407 B (0.00000172)	0.000708 B (0.00000302)	0.000188 B (0.00000068)	0.000392 (0.000000798)
PCB-119 (2,3',4,4',6-PeCB)	---	---	---	0.000439 B (0.00000233)	0.000934 EMPC (0.0000075)	0.000166 (0.00000103)	0.00033 B (0.00000127)
PCB-120 (2,3',4,5,5'-PeCB)	---	---	---	U (0.00000196)	U (0.00000631)	U (0.000000871)	0.00000355 EMPC J (0.00000107)
PCB-121 (2,3',4,5',6-PeCB)	---	---	---	U (0.00000198)	U (0.00000636)	U (0.000000877)	U (0.00000108)
PCB-122 (2,3,3',4',5'-PeCB)	---	---	---	0.00000411 JQ (0.00000189)	0.0000101 JQ (0.00000362)	0.00000239 JQ (0.0000008)	0.00000454 J (0.000000913)
PCB-123 (2,3',4,4',5'-PeCB)	---	---	---	0.00000347 JQ (0.00000176)	0.00000925 EMPC J (0.00000332)	0.00000206 EMPC J (0.000000741)	UB (0.000000876)
PCB-124 (2,3',4',5,5'-PeCB)	---	---	---	0.0000138 J (0.00000177)	0.0000277 EMPC J (0.00000339)	0.00000499 EMPC J (0.000000749)	0.0000168 BJ (0.000000856)
PCB-125 (2,3',4',5',6-PeCB)	---	---	---	0.000439 B (0.00000233)	0.000934 EMPC (0.0000075)	0.000166 (0.00000103)	0.00033 B (0.00000127)
PCB-126 (3,3',4,4',5-PeCB)	---	---	---	0.00000337 JQ (0.00000161)	0.00000594 EMPC J (0.00000332)	U (0.000000742)	UB (0.0000008)
PCB-127 (3,3',4,5,5'-PeCB)	---	---	---	U (0.00000171)	U (0.00000329)	U (0.000000726)	U (0.000000829)
PCB-040 (2,2',3,3'-TeCB)	---	---	---	0.00041 (0.00000255)	0.000585 B (0.00000621)	0.000096 (0.00000107)	0.000179 B (0.00000112)
PCB-041 (2,2',3,4-TeCB)	---	---	---	0.00041 (0.00000255)	0.000585 B (0.00000621)	0.000096 (0.00000107)	0.000179 B (0.00000112)
PCB-042 (2,2',3,4'-TeCB)	---	---	---	0.000297 (0.0000026)	0.000406 (0.00000632)	0.00005 (0.00000109)	0.000114 B (0.00000114)
PCB-043 (2,2',3,5-TeCB)	---	---	---	0.0000508 Q (0.00000238)	0.0000626 J (0.0000058)	0.00001 EMPC J (0.000000997)	0.0000324 BJ (0.00000105)
PCB-044 (2,2',3,5'-TeCB)	---	---	---	0.00149 B (0.00000228)	0.00192 B (0.00000555)	0.000256 B (0.000000954)	0.000568 B (0.000001)
PCB-045 (2,2',3,6-TeCB)	---	---	---	0.000564 B (0.00000264)	0.000687 B (0.00000644)	0.0000734 (0.00000111)	0.000181 (0.00000116)
PCB-046 (2,2',3,6'-TeCB)	---	---	---	0.000343 (0.00000313)	0.000409 (0.00000761)	0.0000378 J (0.00000131)	0.0000908 (0.00000138)
PCB-047 (2,2',4,4'-TeCB)	---	---	---	0.00149 B (0.00000228)	0.00192 B (0.00000555)	0.000256 B (0.000000954)	0.000568 B (0.000001)
PCB-048 (2,2',4,5-TeCB)	---	---	---	0.000054 (0.00000253)	0.0000873 J (0.00000616)	0.0000215 J (0.00000106)	0.0000234 BJ (0.00000111)
PCB-049 (2,2',4,5'-TeCB)	---	---	---	0.00168 (0.0000021)	0.00219 B (0.00000511)	0.000225 (0.000000879)	0.000613 B (0.000000926)
PCB-050 (2,2',4,6-TeCB)	---	---	---	0.00137 (0.00000246)	0.00146 (0.00000598)	0.000135 (0.00000103)	0.000339 B (0.00000108)
PCB-051 (2,2',4,6'-TeCB)	---	---	---	0.000564 B (0.00000264)	0.000687 B (0.00000644)	0.0000734 (0.00000111)	0.000181 (0.00000116)
PCB-052 (2,2',5,5'-TeCB)	---	---	---	0.00216 B (0.00000246)	0.003 B (0.00000599)	0.000389 B (0.00000103)	0.000806 B (0.00000108)
PCB-053 (2,2',5,6'-TeCB)	---	---	---	0.00137 (0.00000246)	0.00146 (0.00000598)	0.000135 (0.00000103)	0.000339 B (0.00000108)
PCB-054 (2,2',6,6'-TeCB)	---	---	---	0.0000927 (0.00000493)	0.0000758 J (0.00000732)	0.00000695 JQ (0.0000015)	0.0000177 J (0.00000162)
PCB-055 (2,3,3',4-TeCB)	---	---	---	0.00000407 JQ (0.00000198)	0.0000113 EMPC J (0.00000481)	0.00000216 EMPC J (0.000000827)	UB (0.00000087)
PCB-056 (2,3,3',4'-TeCB)	---	---	---	0.0000577 (0.00000186)	0.0000953 BJ (0.00000453)	0.0000343 J (0.000000778)	0.0000311 BJ (0.000000819)
PCB-057 (2,3,3',5-TeCB)	---	---	---	0.0000205 J (0.00000188)	0.000039 J (0.00000458)	0.00000257 J (0.000000787)	0.0000126 J (0.000000829)
PCB-058 (2,3,3',5'-TeCB)	---	---	---	0.00000539 JQ (0.00000187)	0.00000579 J (0.00000456)	U (0.000000783)	UB (0.000000825)
PCB-059 (2,3,3',6-TeCB)	---	---	---	0.000086 (0.00000182)	0.000117 J (0.00000442)	0.000018 J (0.00000076)	0.0000462 B (0.0000008)
PCB-060 (2,3,4,4'-TeCB)	---	---	---	0.000016 JQ (0.00000192)	UB (0.00000466)	0.0000138 J (0.000000801)	UB (0.000000844)
PCB-061 (2,3,4,5-TeCB)	---	---	---	0.000456 B (0.00000181)	0.000682 B (0.00000442)	0.000192 B (0.000000759)	0.000242 B (0.000000799)
PCB-062 (2,3,4,6-TeCB)	---	---	---	0.000086 (0.00000182)	0.000117 J (0.00000442)	0.000018 J (0.00000076)	0.0000462 B (0.0000008)
PCB-063 (2,3,4',5-TeCB)	---	---	---	0.0000295 J (0.00000174)	0.0000485 J (0.00000425)	0.00000495 EMPC J (0.00000073)	0.0000163 J (0.000000768)
PCB-064 (2,3,4',6-TeCB)	---	---	---	0.000151 B (0.00000172)	0.000225 B (0.00000419)	0.0000535 (0.000000719)	0.0000702 B (0.000000758)
PCB-065 (2,3,5,6-TeCB)	---	---	---	0.00149 B (0.00000228)	0.00192 B (0.00000555)	0.000256 B (0.000000954)	0.000568 B (0.000001)
PCB-066 (2,3',4,4'-TeCB)	---	---	---	0.000313 (0.0000018)	0.000461 B (0.00000439)	0.000108 B (0.000000754)	0.000162 B (0.000000794)
PCB-067 (2,3',4,5-TeCB)	---	---	---	0.0000122 JQ (0.00000169)	0.0000246 EMPC J (0.00000412)	0.00000249 EMPC J (0.000000708)	UB (0.000000745)
PCB-068 (2,3',4,5'-TeCB)	---	---	---	0.0000275 J (0.00000171)	UB (0.00000415)	UB (0.000000713)	0.0000147 BJ (0.000000751)
PCB-069 (2,3',4,6-TeCB)	---	---	---	0.00168 (0.0000021)	0.00219 B (0.00000511)	0.000225 (0.000000879)	0.000613 B (0.000000926)
PCB-070 (2,3',4',5-TeCB)	---	---	---	0.000456 B (0.00000181)	0.000682 B (0.00000442)	0.000192 B (0.000000759)	0.000242 B (0.000000799)
PCB-076 (2,3',4',5'-TeCB)	---	---	---	0.000456 B (0.00000181)	0.000682 B (0.00000442)	0.000192 B (0.000000759)	0.000242 B (0.000000799)
PCB-071 (2,3',4',6-TeCB)	---	---	---	0.00041 (0.00000255)	0.000585 B (0.00000621)	0.000096 (0.00000107)	0.000179 B (0.00000112)
PCB-072 (2,3',5,5'-TeCB)	---	---	---	0.0000295 J (0.00000183)	0.0000491 J (0.00000445)	0.00000373 J (0.000000766)	0.0000165 J (0.000000806)
PCB-073 (2,3',5',6-TeCB)	---	---	---	0.0000508 Q (0.00000238)	0.0000626 J (0.0000058)	0.00001 EMPC J (0.000000997)	0.0000324 BJ (0.00000105)
PCB-074 (2,4,4',5-TeCB)	---	---	---	0.000456 B (0.00000181)	0.000682 B (0.00000442)	0.000192 B (0.000000759)	0.000242 B (0.000000799)
PCB-075 (2,4,4',6-TeCB)	---	---	---	0.000086 (0.00000182)	0.000117 J (0.00000442)	0.000018 J (0.00000076)	0.0000462 B (0.0000008)
PCB-077 (3,3',4,4'-TeCB)	---	---	---	0.00000546 JQ (0.00000175)	0.00000911 EMPC J (0.00000432)	0.00000419 J (0.000000742)	UB (0.000000772)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-01	MB-MW-01	MB-MW-01	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02
ENVIRON Sample ID	MB-MW-01-20121017	MB-MW-01-20130410	MB-MW-01-20131009	MB-MW-02-20100726	MB-MW-02-20101018	MB-MW-02-20110110	MB-MW-02-20110411
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	10/17/2012	4/10/2013	10/9/2013	7/26/2010	10/18/2010	1/10/2011	4/11/2011
Comments							
PCB-078 (3,3',4,5-TeCB)	---	---	---	U (0.00000194)	U (0.00000473)	U (0.000000813)	U (0.000000857)
PCB-079 (3,3',4,5'-TeCB)	---	---	---	0.00000437 J (0.00000171)	0.0000151 EMPC J (0.00000415)	0.00000258 J (0.000000714)	UB (0.000000752)
PCB-081 (3,4,4',5-TeCB)	---	---	---	U (0.00000177)	U (0.00000426)	U (0.000000733)	UB (0.000000781)
PCB-016 (2,2',3-TrCB)	---	---	---	0.00022 (0.00000425)	UB (0.0000105)	0.0000896 (0.00000162)	0.0000571 B (0.00000189)
PCB-017 (2,2',4-TrCB)	---	---	---	0.00111 (0.00000354)	0.000915 (0.00000878)	0.00017 (0.00000135)	0.00023 B (0.00000157)
PCB-018 (2,2',5-TrCB)	---	---	---	0.00125 (0.00000314)	0.000971 B (0.00000778)	0.000286 B (0.0000012)	0.000295 B (0.00000139)
PCB-019 (2,2',6-TrCB)	---	---	---	0.00133 (0.00000434)	0.000829 (0.0000108)	0.000215 (0.00000166)	0.000218 (0.00000193)
PCB-020 (2,3,3'-TrCB)	---	---	---	0.000599 B (0.00000178)	0.000739 B (0.00000339)	0.000186 B (0.000000744)	0.00019 B (0.000000664)
PCB-021 (2,3,4-TrCB)	---	---	---	0.0000941 B (0.00000178)	UB (0.0000034)	0.0000639 B (0.000000746)	UB (0.000000666)
PCB-022 (2,3,4'-TrCB)	---	---	---	0.0000721 (0.00000181)	UB (0.00000345)	0.0000435 B (0.000000758)	UB (0.000000676)
PCB-023 (2,3,5-TrCB)	---	---	---	U (0.00000185)	U (0.00000352)	U (0.000000773)	UB (0.00000069)
PCB-024 (2,3,6-TrCB)	---	---	---	U (0.00000297)	0.0000288 EMPC J (0.00000736)	U (0.00000113)	0.00000566 EMPC J (0.00000132)
PCB-025 (2,3',4-TrCB)	---	---	---	0.000455 (0.00000165)	0.000508 (0.00000314)	0.0000491 (0.000000689)	0.000108 B (0.000000615)
PCB-026 (2,3',5-TrCB)	---	---	---	0.000805 (0.00000175)	0.000892 B (0.00000333)	0.0000926 (0.000000731)	0.000203 B (0.000000653)
PCB-027 (2,3',6-TrCB)	---	---	---	0.00182 (0.00000256)	0.00136 (0.00000635)	0.000187 (0.000000977)	0.000352 (0.00000114)
PCB-028 (2,4,4'-TrCB)	---	---	---	0.000599 B (0.00000178)	0.000739 B (0.00000339)	0.000186 B (0.000000744)	0.00019 B (0.000000664)
PCB-030 (2,4,6-TrCB)	---	---	---	0.00125 (0.00000314)	0.000971 B (0.00000778)	0.000286 B (0.0000012)	0.000295 B (0.00000139)
PCB-029 (2,4,5-TrCB)	---	---	---	0.000805 (0.00000175)	0.000892 B (0.00000333)	0.0000926 (0.000000731)	0.000203 B (0.000000653)
PCB-031 (2,4',5-TrCB)	---	---	---	0.00037 B (0.00000174)	0.000441 B (0.00000331)	0.000138 B (0.000000726)	0.000121 B (0.000000649)
PCB-032 (2,4',6-TrCB)	---	---	---	0.000738 S (0.00000251)	0.00083 (0.00000622)	0.000141 (0.000000958)	0.000222 (0.00000112)
PCB-033 (2,3',4'-TrCB)	---	---	---	0.0000941 B (0.00000178)	UB (0.0000034)	0.0000639 B (0.000000746)	UB (0.000000666)
PCB-034 (2,3',5'-TrCB)	---	---	---	0.00000469 JQ (0.00000182)	0.00000931 EMPC J (0.00000347)	0.00000123 EMPC J (0.000000761)	UB (0.000000679)
PCB-035 (3,3',4-TrCB)	---	---	---	U (0.00000187)	U (0.00000356)	0.00000196 EMPC J (0.000000782)	UB (0.000000698)
PCB-036 (3,3',5-TrCB)	---	---	---	0.0000342 J (0.00000181)	0.0000541 J (0.00000344)	0.00000376 EMPC J (0.000000755)	UB (0.000000674)
PCB-037 (3,4,4'-TrCB)	---	---	---	0.0000138 J (0.00000185)	UB (0.00000353)	0.0000262 J (0.000000775)	UB (0.000000692)
PCB-038 (3,4,5-TrCB)	---	---	---	U (0.00000191)	U (0.00000363)	U (0.000000797)	UB (0.000000712)
PCB-039 (3,4',5-TrCB)	---	---	---	U (0.00000169)	0.00000289 EMPC J (0.00000323)	U (0.000000708)	UB (0.000000633)
PCB Aroclors							
PCBs (total)	U (0.01)	U (0.01)	U (0.0095)	U (0.00299)	0.0668 (0.00299)	R (0.00302)	U (0.00302)
Aroclor-1016	U (0.01)	U (0.01)	U (0.0095)	U (0.00257)	0.0424 (0.00257)	R (0.00259)	U (0.00259)
Aroclor-1242	U (0.01)	U (0.01)	U (0.0095)	U (0.00189)	U (0.00189)	R (0.00191)	U (0.00191)
Aroclor-1248	U (0.01)	U (0.01)	U (0.0095)	U (0.00232)	U (0.00232)	R (0.00234)	U (0.00234)
Aroclor-1260	U (0.01)	U (0.01)	U (0.0095)	U (0.00138)	0.0244 (0.00138)	R (0.0014)	U (0.0014)
Aroclor-1268	U (0.01)	U (0.01)	U (0.0095)	U (0.00277)	U (0.00277)	R (0.0028)	U (0.0028)
CDDF							
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	---	---	---	U (0.00000189)	---	U (0.000000493)	---
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	---	---	---	U (0.00000148)	---	0.00000131 EMPC J (0.000000389)	---
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	---	---	---	0.0000046 J (0.00000259)	---	0.0000156 EMPC J (0.000000704)	---
Octachlorodibenzo-p-dioxin	---	---	---	0.0000438 J (0.00000264)	---	0.000195 B (0.000000815)	---
2,3,7,8-Tetrachlorodibenzo-p-dioxin	---	---	---	U (0.00000475)	---	0.000000152 BJQ (0.000000259)	---
1,2,3,7,8-Pentachlorodibenzofuran	---	---	---	U (0.00000166)	---	U (0.000000308)	---
1,2,3,4,7,8-Hexachlorodibenzofuran	---	---	---	U (0.00000108)	---	UB (0.000000409)	---
1,2,3,4,6,7,8-Heptachlorodibenzofuran	---	---	---	U (0.00000154)	---	UB (0.000000334)	---
Octachlorodibenzofuran	---	---	---	0.00000703 JQ (0.00000267)	---	0.0000297 BJ (0.000000467)	---

Notes:
1 All concentrations are presented in ug/L (ppb).
2 Only compounds with at least one detection are shown.

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-03
ENVIRON Sample ID	MB-MW-02-20110725	MB-MW-02-20111026	MB-MW-02-20120424	MB-MW-02-20121017	MB-MW-02-20130410	MB-MW-02-20131009	MB-MW-03-20100727
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	7/25/2011	10/26/2011	4/24/2012	10/17/2012	4/10/2013	10/9/2013	7/27/2010
Comments							
SVOC							
Acenaphthene	0.58 J (1.9)	---	U (0.2)	0.75 J (2.3)	U (2.1)	U (1.9)	1.48 J (0.156)
Acenaphthylene	U (0.15)	---	U (0.2)	U (2.3)	U (2.1)	U (1.9)	U (0.164)
Acetophenone	U (0.78)	---	1.2 B (1)	U (11)	U (10)	U (9.7)	U (0.864)
Anthracene	0.25 J (1.9)	---	0.29 (0.2)	U (2.3)	0.37 J (2.1)	U (1.9)	0.432 J (0.166)
Benzaldehyde	U (1.5)	---	1.2 B (1)	U (11)	U (10)	U (9.7)	U (1.62)
Benzo(a)anthracene	U (0.14)	---	U (0.2)	U (2.3)	U (2.1)	U (1.9)	U (0.159)
Benzo(a)pyrene	UJ (0.13)	---	0.15 B (0.2)	U (2.3)	UL (2.1)	U (1.9)	U (0.145)
Benzo(b)fluoranthene	UJ (0.15)	---	0.67 B (0.2)	U (2.3)	UL (2.1)	U (1.9)	U (0.17)
Benzo(g,h,i)perylene	U (0.15)	---	0.11 B (0.2)	U (2.3)	U (2.1)	U (1.9)	U (0.163)
Benzo(k)fluoranthene	UJ (0.53)	---	0.089 J (0.2)	U (2.3)	UL (2.1)	U (1.9)	U (0.591)
Biphenyl	U (0.4)	---	0.16 B (1)	U (11)	U (10)	U (9.7)	U (0.448)
bis(2-Chloroethyl) ether	U (0.24)	---	R (0.2)	U (2.3)	U (2.1)	U (1.9)	U (0.271)
bis(2-Ethylhexyl)phthalate	U (12)	---	U (2)	U (23)	U (21)	U (19)	U (13.5)
Butylbenzylphthalate	U (1.4)	---	U (1)	U (11)	U (10)	U (9.7)	U (1.54)
Caprolactam	U (12)	---	U (5.1)	U (57)	U (52)	42 J (49)	30.5 J (12.9)
Carbazole	U (0.15)	---	U (0.2)	U (2.3)	U (2.1)	U (1.9)	0.801 J (0.171)
4-Chloroaniline	U (0.86)	---	U (1)	U (11)	U (10)	U (9.7)	2.04 J (0.956)
2-Chlorophenol	U (1.6)	---	UL (1)	U (11)	U (10)	U (9.7)	U (1.78)
4-Chlorophenyl-phenyl ether	U (0.49)	---	U (1)	U (11)	U (10)	U (9.7)	U (0.543)
Chrysene	U (0.14)	---	U (0.2)	U (2.3)	U (2.1)	U (1.9)	U (0.151)
Dibenz(a,h)anthracene	U (0.15)	---	0.54 B (0.2)	U (2.3)	UL (2.1)	U (1.9)	U (0.167)
Dibenzofuran	U (0.6)	---	0.083 J (1)	U (11)	U (10)	U (9.7)	0.672 J (0.666)
2,4-Dichlorophenol	U (0.32)	---	0.082 J (0.2)	U (2.3)	U (2.1)	U (1.9)	U (0.361)
Diethylphthalate	U (1.4)	---	20 (1)	3.9 J (11)	U (10)	97 (9.7)	U (1.58)
2,4-Dimethylphenol	250 (9.7)	---	3.3 L (1)	3.5 J (11)	65 (10)	150 (9.7)	U (0.92)
Dimethylphthalate	U (0.74)	---	U (1)	U (11)	U (10)	U (9.7)	U (0.826)
Di-n-butylphthalate	U (1.2)	---	U (1)	17 (11)	U (10)	U (9.7)	U (1.35)
Di-n-octylphthalate	U (2)	---	U (1)	U (11)	U (10)	U (9.7)	U (2.23)
Fluoranthene	0.27 J (1.9)	---	U (0.2)	U (2.3)	U (2.1)	U (1.9)	1.48 J (0.175)
Fluorene	U (0.21)	---	U (0.2)	U (2.3)	U (2.1)	U (1.9)	0.544 J (0.233)
Indeno(1,2,3-cd)pyrene	U (0.19)	---	0.43 B (0.2)	U (2.3)	U (2.1)	U (1.9)	U (0.215)
Isophorone	U (0.63)	---	U (1)	U (11)	2.2 J (10)	U (9.7)	U (0.696)
2-Methylnaphthalene	2.3 (1.9)	---	0.41 B (0.2)	U (2.3)	U (2.1)	U (1.9)	UB (0.132)
2-Methylphenol	1.8 J (9.7)	---	0.11 J (1)	U (11)	U (10)	U (9.7)	U (0.931)
3&4-Methylphenol	---	---	0.35 J (1)	U (11)	U (10)	U (9.7)	---
4-Methylphenol	U (0.88)	---	---	---	---	---	13.7 (0.974)
Naphthalene	250 (1.9)	---	1.2 B (0.2)	5.5 (2.3)	U (2.1)	1.2 J (1.9)	1.08 J (0.151)
N-Nitrosodiphenylamine	U (0.83)	---	U (1)	U (11)	U (10)	U (9.7)	U (0.921)
Pentachlorophenol	U (0.64)	---	UL (1)	U (11)	U (10)	U (9.7)	6.49 J (0.716)
Phenanthrene	0.45 J (1.9)	---	0.083 B (0.2)	U (2.3)	U (2.1)	U (1.9)	1.16 J (0.461)
Phenol	U (0.56)	---	0.86 L (0.2)	U (2.3)	U (2.1)	U (1.9)	1.91 J (0.627)
Pyrene	0.18 J (1.9)	---	0.18 J (0.2)	U (2.3)	U (2.1)	U (1.9)	1.34 J (0.17)
PCB Congeners							
13C12-PCB 114	---	0.00000856 EMPC J (0.0000421)	---	---	---	---	---
PCB-001 (2-CB)	0.0006 B (0.00000071)	0.000349 B (0.0000421)	---	---	---	---	0.00019 J (0.0000022)
PCB-002 (3-CB)	0.000016 J (0.00000073)	0.0000327 J (0.0000421)	---	---	---	---	0.0000198 JQ (0.00000259)
PCB-003 (4-CB)	0.000009 J (0.00000074)	0.0000202 J (0.0000421)	---	---	---	---	0.000055 J (0.0000031)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-03
ENVIRON Sample ID	MB-MW-02-20110725	MB-MW-02-20111026	MB-MW-02-20120424	MB-MW-02-20121017	MB-MW-02-20130410	MB-MW-02-20131009	MB-MW-03-20100727
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	7/25/2011	10/26/2011	4/24/2012	10/17/2012	4/10/2013	10/9/2013	7/27/2010
Comments							
PCB-209 (DeCB)	0.000078 EMPC (0.0000018)	0.000112 (0.0000421)	---	---	---	---	0.0169 (0.00000671)
PCB-004 (2,2'-DiCB)	0.0077 (0.0000049)	0.00264 B (0.0000632)	---	---	---	---	0.00175 B (0.0000177)
PCB-005 (2,3-DiCB)	0.0000056 EMPC J (0.0000033)	0.0000054 B (0.0000421)	---	---	---	---	0.0000178 JQ (0.0000149)
PCB-006 (2,3'-DiCB)	0.00024 (0.0000031)	0.0000797 B (0.0000421)	---	---	---	---	0.00029 Q (0.000014)
PCB-007 (2,4-DiCB)	0.000018 EMPC J (0.0000032)	0.00000819 B (0.0000421)	---	---	---	---	0.0000293 JQ (0.0000144)
PCB-008 (2,4'-DiCB)	0.00022 B (0.000003)	0.0000833 B (0.0000632)	---	---	---	---	0.00167 B (0.0000137)
PCB-009 (2,5-DiCB)	0.000036 EMPC J (0.0000032)	0.0000198 B (0.0000421)	---	---	---	---	0.0000729 JQ (0.0000145)
PCB-010 (2,6-DiCB)	0.000088 (0.0000035)	0.0000432 (0.0000421)	---	---	---	---	0.0000844 JQ (0.0000156)
PCB-011 (3,3'-DiCB)	UB (0.0000031)	0.0000176 B (0.0000632)	---	---	---	---	UB (0.0000138)
PCB-012 (3,4-DiCB)	0.000013 EMPC J (0.0000031)	0.0000159 B (0.0000632)	---	---	---	---	0.0000495 JQ (0.0000142)
PCB-013 (3,4'-DiCB)	0.000013 EMPC J (0.0000031)	0.0000159 B (0.0000632)	---	---	---	---	0.0000495 JQ (0.0000142)
PCB-014 (3,5-DiCB)	0.0000029 EMPC J (0.0000027)	0.00000385 B (0.0000421)	---	---	---	---	U (0.0000122)
PCB-015 (4,4'-DiCB)	0.000022 EMPC J (0.000003)	0.0000561 (0.0000421)	---	---	---	---	0.000669 (0.0000156)
PCB-170 (2,2',3,3',4,4',5-HpCB)	0.000053 (0.0000017)	0.000183 (0.0000421)	---	---	---	---	0.0015 (0.000015)
PCB-171 (2,2',3,3',4,4',6-HpCB)	0.000017 EMPC J (0.0000017)	0.0000535 EMPC (0.0000421)	---	---	---	---	0.000452 (0.0000132)
PCB-172 (2,2',3,3',4,5,5'-HpCB)	0.0000088 J (0.0000017)	0.0000202 EMPC J (0.0000421)	---	---	---	---	0.000277 (0.0000131)
PCB-173 (2,2',3,3',4,5,6-HpCB)	0.000017 EMPC J (0.0000017)	0.0000535 EMPC (0.0000421)	---	---	---	---	0.000452 (0.0000132)
PCB-174 (2,2',3,3',4,5,6'-HpCB)	0.000046 B (0.0000016)	0.000191 (0.0000421)	---	---	---	---	0.00188 (0.0000122)
PCB-175 (2,2',3,3',4,5',6-HpCB)	0.0000024 EMPC J (0.0000015)	0.00000665 J (0.0000421)	---	---	---	---	0.0000626 JQ (0.0000117)
PCB-177 (2,2',3,3',4,5',6'-HpCB)	0.000027 BJ (0.0000016)	0.0000945 (0.0000421)	---	---	---	---	0.00103 (0.0000125)
PCB-176 (2,2',3,3',4,6,6'-HpCB)	0.0000068 EMPC J (0.0000012)	0.0000215 J (0.0000421)	---	---	---	---	0.000213 (0.00000895)
PCB-178 (2,2',3,3',5,5',6-HpCB)	0.000008 J (0.0000016)	0.0000363 J (0.0000421)	---	---	---	---	0.000544 (0.0000127)
PCB-179 (2,2',3,3',5,6,6'-HpCB)	0.000024 J (0.0000012)	0.000094 (0.0000421)	---	---	---	---	0.00114 (0.00000943)
PCB-180 (2,2',3,4,4',5,5'-HpCB)	0.000094 B (0.0000013)	0.000339 C (0.0000421)	---	---	---	---	0.00611 (0.00000997)
PCB-181 (2,2',3,4,4',5,6-HpCB)	U (0.0000015)	U (0.0000421)	---	---	---	---	U (0.0000117)
PCB-182 (2,2',3,4,4',5,6'-HpCB)	U (0.0000015)	U (0.0000421)	---	---	---	---	0.0000214 J (0.0000114)
PCB-183 (2,2',3,4,4',5',6-HpCB)	0.000034 J (0.0000015)	0.000123 C (0.0000421)	---	---	---	---	0.00166 (0.0000117)
PCB-185 (2,2',3,4,5,5',6-HpCB)	0.000034 J (0.0000015)	0.000123 C183 (0.0000421)	---	---	---	---	0.00166 (0.0000117)
PCB-187 (2,2',3,4',5,5',6-HpCB)	0.000081 (0.0000014)	0.000244 (0.0000421)	---	---	---	---	0.00958 (0.0000109)
PCB-188 (2,2',3,4',5,6,6'-HpCB)	U (0.0000011)	U (0.0000421)	---	---	---	---	U (0.00000794)
PCB-189 (2,3,3',4,4',5,5'-HpCB)	U (0.0000011)	0.00000634 J (0.0000421)	---	---	---	---	0.000047 J (0.00000934)
PCB-190 (2,3,3',4,4',5,6-HpCB)	0.000011 J (0.0000012)	0.0000298 J (0.0000421)	---	---	---	---	0.000218 (0.00000909)
PCB-191 (2,3,3',4,4',5',6-HpCB)	0.0000023 EMPC J (0.0000012)	0.00000608 EMPC J (0.0000421)	---	---	---	---	0.0000687 J (0.00000894)
PCB-193 (2,3,3',4',5,5',6-HpCB)	0.000094 B (0.0000013)	0.000339 C180 (0.0000421)	---	---	---	---	0.00611 (0.00000997)
PCB-128 (2,2',3,3',4,4'-HxCB)	0.000091 (0.0000018)	0.000156 C (0.0000421)	---	---	---	---	0.000965 (0.0000133)
PCB-129 (2,2',3,3',4,5-HxCB)	0.00058 B (0.0000019)	0.00108 C (0.0000421)	---	---	---	---	0.00572 B (0.0000137)
PCB-130 (2,2',3,3',4,5'-HxCB)	0.000035 J (0.0000024)	0.0000598 (0.0000421)	---	---	---	---	0.000269 (0.0000177)
PCB-131 (2,2',3,3',4,6-HxCB)	0.0000079 EMPC J (0.0000025)	0.0000126 EMPC J (0.0000421)	---	---	---	---	0.0000578 JQ (0.0000181)
PCB-132 (2,2',3,3',4,6'-HxCB)	0.00022 (0.0000023)	---	---	---	---	---	0.00185 (0.0000173)
PCB-133 (2,2',3,3',5,5'-HxCB)	0.0000089 J (0.0000023)	---	---	---	---	---	0.0000976 J (0.0000166)
PCB-134 (2,2',3,3',5,6-HxCB)	0.000047 (0.0000024)	0.0000754 C (0.0000421)	---	---	---	---	0.000322 (0.0000177)
PCB-135 (2,2',3,3',5,6'-HxCB)	0.00018 (0.0000027)	0.000364 C (0.0000421)	---	---	---	---	0.002 (0.0000132)
PCB-136 (2,2',3,3',6,6'-HxCB)	0.00009 (0.000002)	0.000163 (0.0000421)	---	---	---	---	0.00079 (0.00000971)
PCB-137 (2,2',3,4,4',5-HxCB)	0.000028 J (0.0000021)	0.0000524 (0.0000421)	---	---	---	---	0.000217 (0.0000153)
PCB-138 (2,2',3,4,4',5'-HxCB)	0.00058 B (0.0000019)	---	---	---	---	---	0.00572 B (0.0000137)
PCB-139 (2,2',3,4,4',6-HxCB)	0.000011 J (0.0000021)	0.00002 J (0.0000421)	---	---	---	---	0.0000726 JQ (0.0000152)
PCB-140 (2,2',3,4,4',6'-HxCB)	0.000011 J (0.0000021)	0.00002 J (0.0000421)	---	---	---	---	0.0000726 JQ (0.0000152)
PCB-141 (2,2',3,4,5,5'-HxCB)	0.00008 (0.0000021)	0.000179 (0.0000421)	---	---	---	---	0.00124 (0.0000158)
PCB-143 (2,2',3,4,5,6'-HxCB)	0.000047 (0.0000024)	0.0000754 C134 (0.0000421)	---	---	---	---	0.000322 (0.0000177)
PCB-144 (2,2',3,4,5',6-HxCB)	0.000016 EMPC J (0.0000025)	0.0000395 J (0.0000421)	---	---	---	---	0.000282 (0.0000123)
PCB-146 (2,2',3,4',5,5'-HxCB)	0.000062 EMPC (0.000002)	0.000138 (0.0000421)	---	---	---	---	0.000765 (0.0000144)
PCB-147 (2,2',3,4',5,6-HxCB)	0.00044 B (0.000002)	0.000927 C (0.0000421)	---	---	---	---	0.00467 B (0.0000147)
PCB-148 (2,2',3,4',5,6'-HxCB)	U (0.0000026)	U (0.0000421)	---	---	---	---	U (0.000013)
PCB-149 (2,2',3,4',5',6-HxCB)	0.00044 B (0.000002)	0.000927 C147 (0.0000421)	---	---	---	---	0.00467 B (0.0000147)
PCB-150 (2,2',3,4',6,6'-HxCB)	U (0.0000018)	U (0.0000421)	---	---	---	---	U (0.00000905)
PCB-151 (2,2',3,5,5',6-HxCB)	0.00018 (0.0000027)	0.000364 C135 (0.0000421)	---	---	---	---	0.002 (0.0000132)
PCB-152 (2,2',3,5,6,6'-HxCB)	U (0.0000019)	U (0.0000421)	---	---	---	---	U (0.00000923)
PCB-153 (2,2',4,4',5,5'-HxCB)	0.00037 B (0.0000016)	0.000815 C (0.0000421)	---	---	---	---	0.00473 B (0.0000119)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-03
ENVIRON Sample ID	MB-MW-02-20110725	MB-MW-02-20111026	MB-MW-02-20120424	MB-MW-02-20121017	MB-MW-02-20130410	MB-MW-02-20131009	MB-MW-03-20100727
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	7/25/2011	10/26/2011	4/24/2012	10/17/2012	4/10/2013	10/9/2013	7/27/2010
Comments							
PCB-154 (2,2',4,4',5,6'-HxCB)	0.00001 J (0.0000022)	0.000011 J (0.0000421)	---	---	---	---	0.0000491 J (0.0000108)
PCB-155 (2,2',4,4',6,6'-HxCB)	U (0.0000018)	U (0.0000421)	---	---	---	---	U (0.0000088)
PCB-156 (2,3,3',4,4',5-HxCB)	0.00006 (0.0000019)	0.000111 C (0.0000421)	---	---	---	---	0.000526 (0.0000143)
PCB-157 (2,3,3',4,4',5'-HxCB)	0.00006 (0.0000019)	0.000111 C156 (0.0000421)	---	---	---	---	0.000526 (0.0000143)
PCB-158 (2,3,3',4,4',6-HxCB)	0.000056 (0.0000015)	0.000101 (0.0000421)	---	---	---	---	0.00057 (0.0000108)
PCB-159 (2,3,3',4,5,5'-HxCB)	0.0000024 EMPC J (0.0000016)	0.00000734 J (0.0000421)	---	---	---	---	0.000052 J (0.0000116)
PCB-160 (2,3,3',4,5,6-HxCB)	0.00058 B (0.0000019)	0.00108 C129 (0.0000421)	---	---	---	---	0.00572 B (0.0000137)
PCB-162 (2,3,3',4',5,5'-HxCB)	U (0.0000016)	0.00000402 EMPC J (0.0000421)	---	---	---	---	0.00000849 J (0.0000115)
PCB-163 (2,3,3',4',5,6-HxCB)	0.00058 B (0.0000019)	0.00108 C129 (0.0000421)	---	---	---	---	0.00572 B (0.0000137)
PCB-164 (2,3,3',4',5',6-HxCB)	0.000037 J (0.0000016)	0.0000762 (0.0000421)	---	---	---	---	0.00037 (0.0000121)
PCB-166 (2,3,4,4',5,6-HxCB)	0.000091 (0.0000018)	0.000156 C128 (0.0000421)	---	---	---	---	0.000965 (0.0000133)
PCB-167 (2,3',4,4',5,5'-HxCB)	0.000017 J (0.0000012)	0.0000332 J (0.0000421)	---	---	---	---	0.000181 J (0.00000849)
PCB-168 (2,3',4,4',5',6-HxCB)	0.00037 B (0.0000016)	0.000815 C153 (0.0000421)	---	---	---	---	0.00473 B (0.0000119)
PCB-169 (3,3',4,4',5,5'-HxCB)	0.0000012 EMPC J (0.0000012)	U (0.0000421)	---	---	---	---	0.00062 Q (0.00000929)
PCB-206 (2,2',3,3',4,4',5,5',6-NoCB)	0.00032 (0.0000016)	0.000443 (0.0000421)	---	---	---	---	0.0686 (0.0000111)
PCB-207 (2,2',3,3',4,4',5,6,6'-NoCB)	0.000023 J (0.0000012)	0.0000424 (0.0000421)	---	---	---	---	0.00533 (0.00000763)
PCB-208 (2,2',3,3',4,5,5',6,6'-NoCB)	0.0001 (0.0000012)	0.000174 (0.0000421)	---	---	---	---	0.0254 (0.00000778)
PCB-194 (2,2',3,3',4,4',5,5'-OcCB)	0.000046 (0.0000013)	0.000109 (0.0000421)	---	---	---	---	0.00916 (0.0000103)
PCB-195 (2,2',3,3',4,4',5,6-OcCB)	0.0000049 J (0.0000014)	0.000025 EMPC J (0.0000421)	---	---	---	---	0.000578 (0.0000112)
PCB-196 (2,2',3,3',4,4',5,6'-OcCB)	0.000023 J (0.0000019)	---	---	---	---	---	0.00347 (0.0000106)
PCB-197 (2,2',3,3',4,4',6,6'-OcCB)	U (0.0000014)	0.00000331 EMPC J (0.0000421)	---	---	---	---	0.000112 J (0.0000079)
PCB-198 (2,2',3,3',4,5,5',6-OcCB)	0.00016 (0.0000019)	0.000207 C (0.0000421)	---	---	---	---	0.0365 (0.000011)
PCB-199 (2,2',3,3',4,5,5',6'-OcCB)	0.00016 (0.0000019)	0.0000196 J (0.0000421)	---	---	---	---	0.0365 (0.000011)
PCB-200 (2,2',3,3',4,5,6,6'-OcCB)	0.0000093 J (0.0000014)	0.00002 EMPC J (0.0000421)	---	---	---	---	0.00141 (0.00000776)
PCB-201 (2,2',3,3',4,5',6,6'-OcCB)	0.000012 EMPC J (0.0000013)	0.000207 C198 (0.0000421)	---	---	---	---	0.00224 (0.00000749)
PCB-202 (2,2',3,3',5,5',6,6'-OcCB)	0.000052 (0.0000015)	0.0000871 (0.0000421)	---	---	---	---	0.011 (0.00000844)
PCB-203 (2,2',3,4,4',5,5',6-OcCB)	0.00013 (0.0000017)	0.000179 (0.0000421)	---	---	---	---	0.0278 (0.00000979)
PCB-204 (2,2',3,4,4',5,6,6'-OcCB)	U (0.0000014)	U (0.0000421)	---	---	---	---	U (0.00000822)
PCB-205 (2,3,3',4,4',5,5',6-OcCB)	U (0.0000011)	0.0000037 J (0.0000421)	---	---	---	---	0.000073 J (0.00000871)
PCB-24/27	---	U (0.0000421)	---	---	---	---	---
PCB-42/59	---	0.000162 (0.0000421)	---	---	---	---	---
PCB-52/69	---	0.00095 B (0.0000421)	---	---	---	---	---
PCB-61/70	---	0.000487 BC (0.0000421)	---	---	---	---	---
PCB-90/101	---	0.000861 C (0.0000421)	---	---	---	---	---
PCB-107/109	---	0.0000643 (0.0000421)	---	---	---	---	---
PCB-132/161	---	0.000395 (0.0000421)	---	---	---	---	---
PCB-133/142	---	0.0000175 J (0.0000421)	---	---	---	---	---
PCB-138/163/164	---	0.00108 C129 (0.0000421)	---	---	---	---	---
PCB-196/203	---	0.0000499 (0.0000421)	---	---	---	---	---
PCB-082 (2,2',3,3',4-PeCB)	0.000056 EMPC (0.0000025)	0.0000744 EMPC (0.0000421)	---	---	---	---	0.000525 Q (0.0000132)
PCB-083 (2,2',3,3',5-PeCB)	0.00048 (0.0000021)	0.000509 C (0.0000421)	---	---	---	---	0.00229 (0.0000111)
PCB-084 (2,2',3,3',6-PeCB)	0.00027 (0.0000024)	0.000254 (0.0000421)	---	---	---	---	0.00145 Q (0.0000126)
PCB-085 (2,2',3,4,4'-PeCB)	0.00011 EMPC (0.0000017)	0.00013 C (0.0000421)	---	---	---	---	0.000641 (0.00000914)
PCB-086 (2,2',3,4,5-PeCB)	0.00046 EMPC (0.0000018)	0.000498 EMPC (0.0000421)	---	---	---	---	0.00291 B (0.00000936)
PCB-087 (2,2',3,4,5'-PeCB)	0.00046 Q (0.0000018)	0.000498 EMPC (0.0000421)	---	---	---	---	0.00291 B (0.00000936)
PCB-088 (2,2',3,4,6-PeCB)	0.00021 (0.0000021)	0.000183 C (0.0000421)	---	---	---	---	0.000655 (0.0000113)
PCB-089 (2,2',3,4,6'-PeCB)	0.0000079 EMPC J (0.0000023)	U (0.0000421)	---	---	---	---	0.0000393 JQ (0.0000122)
PCB-090 (2,2',3,4',5-PeCB)	0.00083 B (0.0000018)	---	---	---	---	---	0.005 B (0.00000952)
PCB-097 (2,2',3,4',5'-PeCB)	0.00046 EMPC (0.0000018)	0.000498 EMPC (0.0000421)	---	---	---	---	0.00291 B (0.00000936)
PCB-091 (2,2',3,4',6-PeCB)	0.00021 (0.0000021)	0.000183 C88 (0.0000421)	---	---	---	---	0.000655 (0.0000113)
PCB-098 (2,2',3,4',6'-PeCB)	0.000036 J (0.000002)	0.0000345 J (0.0000421)	---	---	---	---	0.000155 J (0.0000105)
PCB-092 (2,2',3,5,5'-PeCB)	0.00023 (0.000002)	0.000204 (0.0000421)	---	---	---	---	0.000803 (0.0000108)
PCB-093 (2,2',3,5,6-PeCB)	0.000023 EMPC J (0.0000021)	0.0000159 EMPC J (0.0000421)	---	---	---	---	0.0000364 JQ (0.0000109)
PCB-094 (2,2',3,5,6'-PeCB)	0.00002 J (0.0000023)	0.0000191 J (0.0000421)	---	---	---	---	U (0.0000122)
PCB-095 (2,2',3,5',6-PeCB)	0.0009 (0.0000022)	0.000827 (0.0000421)	---	---	---	---	0.00485 (0.0000115)
PCB-096 (2,2',3,6,6'-PeCB)	0.000017 J (0.0000017)	0.0000113 J (0.0000421)	---	---	---	---	0.0000405 J (0.00000914)
PCB-099 (2,2',4,4',5-PeCB)	0.00048 (0.0000021)	0.000509 C83 (0.0000421)	---	---	---	---	0.00229 (0.0000111)
PCB-100 (2,2',4,4',6-PeCB)	0.000023 EMPC J (0.0000021)	0.0000159 EMPC J (0.0000421)	---	---	---	---	0.0000364 JQ (0.0000109)
PCB-101 (2,2',4,5,5'-PeCB)	0.00083 B (0.0000018)	0.000861 C90 (0.0000421)	---	---	---	---	0.005 B (0.00000952)
PCB-102 (2,2',4,5,6'-PeCB)	0.000036 J (0.000002)	0.0000345 J (0.0000421)	---	---	---	---	0.000155 J (0.0000105)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-03
ENVIRON Sample ID	MB-MW-02-20110725	MB-MW-02-20111026	MB-MW-02-20120424	MB-MW-02-20121017	MB-MW-02-20130410	MB-MW-02-20131009	MB-MW-03-20100727
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	7/25/2011	10/26/2011	4/24/2012	10/17/2012	4/10/2013	10/9/2013	7/27/2010
Comments							
PCB-103 (2,2',4,5',6-PeCB)	0.000021 J (0.000002)	0.0000156 J (0.0000421)	---	---	---	---	U (0.0000107)
PCB-104 (2,2',4,6,6'-PeCB)	U (0.0000015)	U (0.0000421)	---	---	---	---	U (0.00000814)
PCB-105 (2,3,3',4,4'-PeCB)	0.00013 (0.0000013)	0.000193 (0.0000421)	---	---	---	---	0.00128 (0.00000813)
PCB-108 (2,3,3',4,5'-PeCB)	0.000014 J (0.0000014)	0.0000234 J (0.0000421)	---	---	---	---	0.000147 J (0.00000858)
PCB-109 (2,3,3',4,6-PeCB)	0.00046 EMPC (0.0000018)	0.000498 EMPC (0.0000421)	---	---	---	---	0.00291 B (0.00000936)
PCB-107 (2,3,3',4',5-PeCB)	0.000043 (0.0000013)	---	---	---	---	---	0.000247 (0.00000816)
PCB-110 (2,3,3',4',6-PeCB)	0.00098 B (0.0000015)	0.00106 BC (0.0000421)	---	---	---	---	0.00552 B (0.00000808)
PCB-111 (2,3,3',5,5'-PeCB)	U (0.0000014)	U (0.0000421)	---	---	---	---	U (0.00000765)
PCB-113 (2,3,3',5',6-PeCB)	0.00083 B (0.0000018)	0.000861 C90 (0.0000421)	---	---	---	---	0.005 B (0.00000952)
PCB-114 (2,3,4,4',5-PeCB)	0.0000084 J (0.0000012)	---	---	---	---	---	0.0000844 J (0.00000795)
PCB-115 (2,3,4,4',6-PeCB)	0.00098 B (0.0000015)	0.00106 BC110 (0.0000421)	---	---	---	---	0.00552 B (0.00000808)
PCB-116 (2,3,4,5,6-PeCB)	0.00011 Q (0.0000017)	0.00013 C85 (0.0000421)	---	---	---	---	0.000641 (0.00000914)
PCB-117 (2,3,4',5,6-PeCB)	0.00011 EMPC (0.0000017)	0.00013 C85 (0.0000421)	---	---	---	---	0.000641 (0.00000914)
PCB-118 (2,3',4,4',5-PeCB)	0.00049 B (0.0000013)	0.000662 (0.0000421)	---	---	---	---	0.00353 B (0.00000784)
PCB-119 (2,3',4,4',6-PeCB)	0.00046 EMPC (0.0000018)	0.000498 EMPC (0.0000421)	---	---	---	---	0.00291 B (0.00000936)
PCB-120 (2,3',4,5,5'-PeCB)	0.0000024 EMPC J (0.0000015)	0.00000395 J (0.0000421)	---	---	---	---	U (0.00000787)
PCB-121 (2,3',4,5',6-PeCB)	U (0.0000015)	U (0.0000421)	---	---	---	---	U (0.00000793)
PCB-122 (2,3,3',4',5'-PeCB)	0.0000054 JQ (0.0000015)	0.00000651 EMPC J (0.0000421)	---	---	---	---	0.0000561 J (0.00000916)
PCB-123 (2,3',4,4',5'-PeCB)	0.0000061 J (0.0000014)	0.00000836 EMPC J (0.0000421)	---	---	---	---	0.0000481 JQ (0.0000086)
PCB-124 (2,3',4',5,5'-PeCB)	0.000014 J (0.0000014)	0.0000234 J (0.0000421)	---	---	---	---	0.000147 J (0.00000858)
PCB-125 (2,3',4',5',6-PeCB)	0.00046 EMPC (0.0000018)	0.000498 EMPC (0.0000421)	---	---	---	---	0.00291 B (0.00000936)
PCB-126 (3,3',4,4',5-PeCB)	U (0.0000013)	U (0.0000421)	---	---	---	---	0.0000962 JQ (0.00000789)
PCB-127 (3,3',4,5,5'-PeCB)	U (0.0000013)	U (0.0000421)	---	---	---	---	U (0.00000832)
PCB-040 (2,2',3,3'-TeCB)	0.00029 (0.0000018)	0.000297 C (0.0000421)	---	---	---	---	0.00161 (0.0000105)
PCB-041 (2,2',3,4-TeCB)	0.00029 (0.0000018)	0.000297 C40 (0.0000421)	---	---	---	---	0.00161 (0.0000105)
PCB-042 (2,2',3,4'-TeCB)	0.00018 (0.0000018)	---	---	---	---	---	0.000709 (0.0000107)
PCB-043 (2,2',3,5-TeCB)	0.000017 EMPC J (0.0000017)	0.0000159 EMPC J (0.0000421)	---	---	---	---	0.000123 J (0.00000981)
PCB-044 (2,2',3,5'-TeCB)	0.00097 B (0.0000016)	0.000739 BC (0.0000421)	---	---	---	---	0.00303 B (0.00000939)
PCB-045 (2,2',3,6-TeCB)	0.00032 (0.0000018)	0.000209 BC (0.0000421)	---	---	---	---	0.000794 B (0.0000109)
PCB-046 (2,2',3,6'-TeCB)	0.00019 (0.0000022)	0.0001 (0.0000421)	---	---	---	---	0.000285 (0.0000129)
PCB-047 (2,2',4,4'-TeCB)	0.00097 B (0.0000016)	0.000739 BC44 (0.0000421)	---	---	---	---	0.00303 B (0.00000939)
PCB-048 (2,2',4,5-TeCB)	0.000032 J (0.0000018)	0.0000587 (0.0000421)	---	---	---	---	0.000526 (0.0000104)
PCB-049 (2,2',4,5'-TeCB)	0.001 B (0.0000015)	0.000627 BC (0.0000421)	---	---	---	---	0.00179 (0.00000865)
PCB-050 (2,2',4,6-TeCB)	0.00072 (0.0000017)	0.000315 C (0.0000421)	---	---	---	---	0.000668 (0.0000101)
PCB-051 (2,2',4,6'-TeCB)	0.00032 (0.0000018)	0.000209 BC45 (0.0000421)	---	---	---	---	0.000794 B (0.0000109)
PCB-052 (2,2',5,5'-TeCB)	0.0014 B (0.0000017)	---	---	---	---	---	0.00475 B (0.0000101)
PCB-053 (2,2',5,6'-TeCB)	0.00072 (0.0000017)	0.000315 C50 (0.0000421)	---	---	---	---	0.000668 (0.0000101)
PCB-054 (2,2',6,6'-TeCB)	0.000039 Q (0.0000029)	0.0000122 EMPC J (0.0000421)	---	---	---	---	U (0.0000111)
PCB-055 (2,3,3',4-TeCB)	0.0000061 EMPC J (0.0000014)	0.00000633 EMPC J (0.0000421)	---	---	---	---	0.0000404 JQ (0.00000813)
PCB-056 (2,3,3',4'-TeCB)	0.000046 B (0.0000013)	0.000108 (0.0000421)	---	---	---	---	0.000907 (0.00000765)
PCB-057 (2,3,3',5-TeCB)	0.000013 J (0.0000013)	0.00000887 J (0.0000421)	---	---	---	---	0.00001 JQ (0.00000774)
PCB-058 (2,3,3',5'-TeCB)	0.000003 EMPC J (0.0000013)	0.00000327 EMPC J (0.0000421)	---	---	---	---	U (0.0000077)
PCB-059 (2,3,3',6-TeCB)	0.000048 (0.0000013)	0.0000559 C (0.0000421)	---	---	---	---	0.000254 (0.00000747)
PCB-060 (2,3,4,4'-TeCB)	0.000014 J (0.0000013)	0.0000584 (0.0000421)	---	---	---	---	0.000448 (0.00000788)
PCB-061 (2,3,4,5-TeCB)	0.00039 B (0.0000013)	---	---	---	---	---	0.00378 B (0.00000747)
PCB-062 (2,3,4,6-TeCB)	0.000048 (0.0000013)	0.0000559 C59 (0.0000421)	---	---	---	---	0.000254 (0.00000747)
PCB-063 (2,3,4',5-TeCB)	0.000021 J (0.0000012)	0.0000162 EMPC J (0.0000421)	---	---	---	---	0.0000686 J (0.00000718)
PCB-064 (2,3,4',6-TeCB)	0.0001 B (0.0000012)	0.000155 (0.0000421)	---	---	---	---	0.00111 B (0.00000708)
PCB-065 (2,3,5,6-TeCB)	0.00097 B (0.0000016)	0.000739 BC44 (0.0000421)	---	---	---	---	0.00303 B (0.00000939)
PCB-066 (2,3',4,4'-TeCB)	0.00026 B (0.0000013)	0.000321 (0.0000421)	---	---	---	---	0.00196 (0.00000742)
PCB-067 (2,3',4,5-TeCB)	0.0000058 EMPC J (0.0000012)	0.000011 J (0.0000421)	---	---	---	---	0.000056 J (0.00000696)
PCB-068 (2,3',4,5'-TeCB)	0.000018 J (0.0000012)	0.0000139 J (0.0000421)	---	---	---	---	U (0.00000702)
PCB-069 (2,3',4,6-TeCB)	0.001 B (0.0000015)	0.000627 BC49 (0.0000421)	---	---	---	---	0.00179 (0.00000865)
PCB-070 (2,3',4',5-TeCB)	0.00039 B (0.0000013)	0.000487 BC61 (0.0000421)	---	---	---	---	0.00378 B (0.00000747)
PCB-076 (2,3',4',5'-TeCB)	0.00039 B (0.0000013)	0.000487 BC61 (0.0000421)	---	---	---	---	0.00378 B (0.00000747)
PCB-071 (2,3',4',6-TeCB)	0.00029 (0.0000018)	0.000297 C40 (0.0000421)	---	---	---	---	0.00161 (0.0000105)
PCB-072 (2,3',5,5'-TeCB)	0.000019 J (0.0000013)	0.0000128 J (0.0000421)	---	---	---	---	0.0000157 JQ (0.00000753)
PCB-073 (2,3',5',6-TeCB)	0.000017 EMPC J (0.0000017)	0.0000159 EMPC J (0.0000421)	---	---	---	---	0.000123 J (0.00000981)
PCB-074 (2,4,4',5-TeCB)	0.00039 B (0.0000013)	0.000487 BC61 (0.0000421)	---	---	---	---	0.00378 B (0.00000747)
PCB-075 (2,4,4',6-TeCB)	0.000048 (0.0000013)	0.0000559 C59 (0.0000421)	---	---	---	---	0.000254 (0.00000747)
PCB-077 (3,3',4,4'-TeCB)	0.0000036 EMPC J (0.0000013)	0.0000189 J (0.0000421)	---	---	---	---	0.000231 Q (0.0000071)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-02	MB-MW-03
ENVIRON Sample ID	MB-MW-02-20110725	MB-MW-02-20111026	MB-MW-02-20120424	MB-MW-02-20121017	MB-MW-02-20130410	MB-MW-02-20131009	MB-MW-03-20100727
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	7/25/2011	10/26/2011	4/24/2012	10/17/2012	4/10/2013	10/9/2013	7/27/2010
Comments							
PCB-078 (3,3',4,5-TeCB)	U (0.0000014)	U (0.0000421)	---	---	---	---	U (0.000008)
PCB-079 (3,3',4,5'-TeCB)	0.0000059 EMPC J (0.0000012)	0.00000589 EMPC J (0.0000421)	---	---	---	---	0.0000446 J (0.00000702)
PCB-081 (3,4,4',5-TeCB)	U (0.0000012)	U (0.0000421)	---	---	---	---	0.0000084 J (0.00000741)
PCB-016 (2,2',3-TrCB)	0.00013 EMPC (0.0000034)	0.000119 (0.0000421)	---	---	---	---	0.00142 (0.0000124)
PCB-017 (2,2',4-TrCB)	0.00067 (0.0000028)	0.00025 (0.0000421)	---	---	---	---	0.00132 (0.0000104)
PCB-018 (2,2',5-TrCB)	0.00079 B (0.0000025)	0.000396 BC (0.0000632)	---	---	---	---	0.00333 (0.00000919)
PCB-019 (2,2',6-TrCB)	0.00074 (0.0000034)	0.000298 (0.0000421)	---	---	---	---	0.000817 (0.0000127)
PCB-020 (2,3,3'-TrCB)	0.00038 B (0.000001)	0.000368 BC (0.0000421)	---	---	---	---	0.00334 B (0.00000854)
PCB-021 (2,3,4-TrCB)	0.000058 EMPC (0.000001)	0.0000939 BC (0.0000421)	---	---	---	---	0.00161 B (0.00000856)
PCB-022 (2,3,4'-TrCB)	0.000042 B (0.000001)	0.00008 B (0.0000421)	---	---	---	---	0.00104 (0.0000087)
PCB-023 (2,3,5-TrCB)	U (0.0000011)	U (0.0000421)	---	---	---	---	U (0.00000887)
PCB-024 (2,3,6-TrCB)	0.000013 J (0.0000023)	---	---	---	---	---	0.0000483 JQ (0.00000869)
PCB-025 (2,3',4-TrCB)	0.00025 (0.00000095)	0.000126 (0.0000421)	---	---	---	---	0.000266 (0.00000791)
PCB-026 (2,3',5-TrCB)	0.00045 B (0.000001)	0.000238 C (0.0000421)	---	---	---	---	0.000627 (0.0000084)
PCB-027 (2,3',6-TrCB)	0.0011 (0.000002)	0.000335 (0.0000421)	---	---	---	---	0.000262 (0.0000075)
PCB-028 (2,4,4'-TrCB)	0.00038 B (0.000001)	0.000368 BC20 (0.0000421)	---	---	---	---	0.00334 B (0.00000854)
PCB-030 (2,4,6-TrCB)	0.00079 B (0.0000025)	0.000396 BC18 (0.0000632)	---	---	---	---	0.00333 (0.00000919)
PCB-029 (2,4,5-TrCB)	0.00045 B (0.000001)	0.000238 C26 (0.0000421)	---	---	---	---	0.000627 (0.0000084)
PCB-031 (2,4',5-TrCB)	0.00023 B (0.000001)	0.000277 B (0.0000421)	---	---	---	---	0.00288 B (0.00000834)
PCB-032 (2,4',6-TrCB)	0.00049 (0.000002)	0.000233 (0.0000421)	---	---	---	---	0.00106 (0.00000735)
PCB-033 (2,3',4'-TrCB)	0.000058 EMPC (0.000001)	0.0000939 BC21 (0.0000421)	---	---	---	---	0.00161 B (0.00000856)
PCB-034 (2,3',5'-TrCB)	0.0000039 EMPC J (0.0000011)	0.00000209 EMPC J (0.0000421)	---	---	---	---	0.0000143 J (0.00000873)
PCB-035 (3,3',4-TrCB)	U (0.0000011)	0.00000438 EMPC J (0.0000421)	---	---	---	---	0.0000309 JQ (0.00000898)
PCB-036 (3,3',5-TrCB)	U (0.000001)	U (0.0000421)	---	---	---	---	U (0.00000867)
PCB-037 (3,4,4'-TrCB)	0.000013 J (0.0000011)	0.000108 (0.0000421)	---	---	---	---	0.000925 (0.0000089)
PCB-038 (3,4,5-TrCB)	U (0.0000011)	U (0.0000421)	---	---	---	---	U (0.00000915)
PCB-039 (3,4',5-TrCB)	U (0.00000098)	U (0.0000421)	---	---	---	---	0.0000129 JQ (0.00000813)
PCB Aroclors							
PCBs (total)	U (0.0028)	U (0.51)	U (0.01)	U (0.01)	U (0.01)	U (0.0094)	U (0.00299)
Aroclor-1016	U (0.0024)	U (0.51)	U (0.01)	U (0.01)	U (0.01)	U (0.0094)	U (0.00257)
Aroclor-1242	U (0.0018)	U (0.51)	U (0.01)	U (0.01)	U (0.01)	U (0.0094)	U (0.00189)
Aroclor-1248	U (0.0022)	U (0.51)	U (0.01)	U (0.01)	U (0.01)	U (0.0094)	U (0.00232)
Aroclor-1260	U (0.0013)	U (0.51)	U (0.01)	U (0.01)	U (0.01)	U (0.0094)	U (0.00138)
Aroclor-1268	U (0.0026)	U (0.51)	U (0.01)	U (0.01)	U (0.01)	U (0.0094)	U (0.00277)
CDDF							
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	U (0.00000077)	---	---	---	---	---	U (0.00000167)
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	U (0.00000075)	---	---	---	---	---	U (0.00000136)
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	0.000034 BJ (0.0000018)	---	---	---	---	---	0.0000179 J (0.00000233)
Octachlorodibenzo-p-dioxin	0.00044 J (0.0000031)	---	---	---	---	---	0.00012 (0.00000227)
2,3,7,8-Tetrachlorodibenzo-p-dioxin	U (0.0000005)	---	---	---	---	---	U (0.00000367)
1,2,3,7,8-Pentachlorodibenzofuran	U (0.00000061)	---	---	---	---	---	U (0.00000147)
1,2,3,4,7,8-Hexachlorodibenzofuran	UB (0.00000045)	---	---	---	---	---	0.00000129 EMPC J (0.000000912)
1,2,3,4,6,7,8-Heptachlorodibenzofuran	UB (0.00000083)	---	---	---	---	---	0.0000088 J (0.00000129)
Octachlorodibenzofuran	0.000049 BJ (0.0000012)	---	---	---	---	---	0.0000107 JQ (0.00000227)

Notes:
1 All concentrations are presented in ug/L (ppb).
2 Only compounds with at least one detection are shown.

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03
ENVIRON Sample ID	MB-MW-03-20101018	MB-MW-03-20101019	MB-MW-03-20110111	MB-MW-03-20110412	MB-MW-03-20110726	MB-MW-03-20111026
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	10/18/2010	10/19/2010	1/11/2011	4/12/2011	7/26/2011	10/26/2011
Comments						
SVOC						
Acenaphthene	---	---	U (0.167)	---	U (0.14)	---
Acenaphthylene	---	---	U (0.176)	---	U (0.14)	---
Acetophenone	---	---	U (0.928)	---	U (0.76)	---
Anthracene	---	---	U (0.179)	---	U (0.15)	---
Benzaldehyde	---	---	U (1.74)	---	U (1.4)	---
Benzo(a)anthracene	---	---	U (0.171)	---	U (0.14)	---
Benzo(a)pyrene	---	---	U (0.155)	---	U (0.13)	---
Benzo(b)fluoranthene	---	---	U (0.182)	---	U (0.15)	---
Benzo(g,h,i)perylene	---	---	U (0.175)	---	U (0.14)	---
Benzo(k)fluoranthene	---	---	U (0.635)	---	U (0.52)	---
Biphenyl	---	---	U (0.481)	---	U (0.4)	---
bis(2-Chloroethyl) ether	---	---	U (0.291)	---	U (0.24)	---
bis(2-Ethylhexyl)phthalate	---	---	U (14.5)	---	U (12)	---
Butylbenzylphthalate	---	---	U (1.65)	---	U (1.4)	---
Caprolactam	---	---	U (13.8)	---	29 J (48)	---
Carbazole	---	---	U (0.183)	---	U (0.15)	---
4-Chloroaniline	---	---	U (1.03)	---	U (0.84)	---
2-Chlorophenol	---	---	U (1.92)	---	U (1.6)	---
4-Chlorophenyl-phenyl ether	---	---	U (0.583)	---	U (0.48)	---
Chrysene	---	---	U (0.162)	---	U (0.13)	---
Dibenz(a,h)anthracene	---	---	U (0.18)	---	U (0.15)	---
Dibenzofuran	---	---	U (0.716)	---	U (0.59)	---
2,4-Dichlorophenol	---	---	U (0.387)	---	U (0.32)	---
Diethylphthalate	---	---	U (1.69)	---	U (1.4)	---
2,4-Dimethylphenol	---	---	U (0.988)	---	U (0.81)	---
Dimethylphthalate	---	---	U (0.887)	---	U (0.73)	---
Di-n-butylphthalate	---	---	U (1.45)	---	U (1.2)	---
Di-n-octylphthalate	---	---	U (2.4)	---	U (2)	---
Fluoranthene	---	---	0.416 J (0.188)	---	0.45 J (1.9)	---
Fluorene	---	---	U (0.251)	---	U (0.21)	---
Indeno(1,2,3-cd)pyrene	---	---	U (0.231)	---	U (0.19)	---
Isophorone	---	---	U (0.747)	---	U (0.61)	---
2-Methylnaphthalene	---	---	U (0.142)	---	U (0.12)	---
2-Methylphenol	---	---	U (1)	---	U (0.82)	---
3&4-Methylphenol	---	---	---	---	---	---
4-Methylphenol	---	---	U (1.05)	---	U (0.86)	---
Naphthalene	---	---	2.75 (0.162)	---	U (0.13)	---
N-Nitrosodiphenylamine	---	---	U (0.989)	---	U (0.81)	---
Pentachlorophenol	---	---	U (0.769)	---	U (0.63)	---
Phenanthrene	---	---	U (0.495)	---	U (0.41)	---
Phenol	---	---	U (0.674)	---	U (0.55)	---
Pyrene	---	---	0.463 J (0.182)	---	0.45 J (1.9)	---
PCB Congeners						
13C12-PCB 114	---	---	---	---	---	0.0000121 EMPC J (0.0000421)
PCB-001 (2-CB)	0.000191 B (0.000000669)	---	0.00015 B (0.00000068)	0.000146 (0.000000361)	0.00015 B (0.00000056)	0.000212 B (0.0000421)
PCB-002 (3-CB)	0.00000931 EMPC J (0.000000718)	---	0.0000107 J (0.000000768)	0.00000943 EMPC J (0.000000395)	0.0000073 EMPC J (0.00000055)	0.0000318 B (0.0000421)
PCB-003 (4-CB)	0.0000257 BJ (0.000000769)	---	0.0000294 J (0.000000874)	0.0000314 BJ (0.000000434)	0.000019 EMPC J (0.00000055)	0.0000427 B (0.0000421)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03
ENVIRON Sample ID	MB-MW-03-20101018	MB-MW-03-20101019	MB-MW-03-20110111	MB-MW-03-20110412	MB-MW-03-20110726	MB-MW-03-20111026
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	10/18/2010	10/19/2010	1/11/2011	4/12/2011	7/26/2011	10/26/2011
Comments						
PCB-209 (DeCB)	0.00261 (0.00000515)	---	0.00724 (0.00000224)	0.00238 (0.00000122)	0.0015 (0.0000011)	0.00448 (0.0000421)
PCB-004 (2,2'-DiCB)	0.00234 B (0.00000801)	---	0.00139 (0.00000364)	0.00115 B (0.0000021)	0.0013 (0.0000023)	0.00147 B (0.0000632)
PCB-005 (2,3-DiCB)	0.0000156 EMPC J (0.00000472)	---	0.00000855 EMPC J (0.00000285)	0.0000112 EMPC J (0.0000015)	0.0000092 EMPC J (0.0000017)	0.0000188 B (0.0000421)
PCB-006 (2,3'-DiCB)	0.00029 B (0.00000444)	---	0.000215 EMPC (0.00000268)	0.000161 B (0.00000141)	0.00018 (0.0000016)	0.000199 EMPC (0.0000421)
PCB-007 (2,4-DiCB)	0.0000294 EMPC J (0.00000456)	---	0.0000209 EMPC J (0.00000276)	0.0000148 EMPC J (0.00000145)	0.000016 EMPC J (0.0000016)	0.0000209 B (0.0000421)
PCB-008 (2,4'-DiCB)	0.00167 B (0.00000435)	---	0.00119 B (0.00000263)	0.000887 B (0.00000138)	0.00097 B (0.0000016)	0.00111 B (0.0000632)
PCB-009 (2,5-DiCB)	0.0000665 EMPC (0.00000459)	---	0.0000542 EMPC (0.00000277)	0.0000371 EMPC J (0.00000146)	0.00004 EMPC (0.0000016)	0.0000524 B (0.0000421)
PCB-010 (2,6-DiCB)	0.000084 EMPC (0.00000493)	---	0.0000603 (0.00000298)	0.000037 EMPC J (0.00000157)	0.000048 (0.0000018)	0.0000624 EMPC (0.0000421)
PCB-011 (3,3'-DiCB)	UB (0.00000437)	---	UB (0.00000264)	UB (0.00000139)	UB (0.0000016)	0.0000205 B (0.0000632)
PCB-012 (3,4-DiCB)	0.0000414 EMPC J (0.00000448)	---	0.0000266 EMPC J (0.00000271)	UB (0.00000142)	0.000019 EMPC J (0.0000016)	0.0000327 B (0.0000632)
PCB-013 (3,4'-DiCB)	0.0000414 EMPC J (0.00000448)	---	0.0000266 EMPC J (0.00000271)	UB (0.00000142)	0.000019 EMPC J (0.0000016)	0.0000327 B (0.0000632)
PCB-014 (3,5-DiCB)	0.00000368 EMPC J (0.00000386)	---	U (0.00000233)	UB (0.00000123)	U (0.0000014)	0.00000413 B (0.0000421)
PCB-015 (4,4'-DiCB)	0.000444 B (0.0000039)	---	0.000346 B (0.00000281)	0.000236 B (0.00000138)	0.00024 B (0.0000016)	0.000281 (0.0000421)
PCB-170 (2,2',3,3',4,4',5-HpCB)	0.000351 (0.00000393)	---	0.000847 (0.00000394)	UB (0.00000189)	0.00016 (0.0000013)	0.000294 (0.0000421)
PCB-171 (2,2',3,3',4,4',6-HpCB)	0.000129 (0.00000372)	---	0.000277 (0.00000381)	UB (0.00000174)	0.000052 (0.0000013)	0.000101 C (0.0000421)
PCB-172 (2,2',3,3',4,5,5'-HpCB)	0.0000709 (0.00000368)	---	0.00014 (0.00000378)	UB (0.00000172)	0.000025 EMPC J (0.0000013)	0.0000514 (0.0000421)
PCB-173 (2,2',3,3',4,5,6-HpCB)	0.000129 (0.00000372)	---	0.000277 (0.00000381)	UB (0.00000174)	0.000052 (0.0000013)	0.000101 C171 (0.0000421)
PCB-174 (2,2',3,3',4,5,6'-HpCB)	0.000481 (0.00000345)	---	0.00104 (0.00000353)	UB (0.00000161)	0.00023 B (0.0000012)	0.00037 (0.0000421)
PCB-175 (2,2',3,3',4,5',6-HpCB)	0.0000205 J (0.00000331)	---	0.0000162 J (0.00000339)	UB (0.00000155)	0.0000079 J (0.0000012)	0.0000153 J (0.0000421)
PCB-177 (2,2',3,3',4,5',6'-HpCB)	0.000244 (0.00000353)	---	0.000569 (0.00000362)	UB (0.00000165)	0.00012 B (0.0000012)	0.000198 (0.0000421)
PCB-176 (2,2',3,3',4,6,6'-HpCB)	0.0000612 (0.00000252)	---	0.000131 (0.00000259)	0.0000394 J (0.00000118)	0.000028 J (0.00000089)	0.0000488 (0.0000421)
PCB-178 (2,2',3,3',5,5',6-HpCB)	0.000125 (0.00000358)	---	0.000279 (0.00000367)	0.0000874 (0.00000167)	0.000064 (0.0000013)	0.000111 (0.0000421)
PCB-179 (2,2',3,3',5,6,6'-HpCB)	0.000285 (0.00000266)	---	0.000354 J (0.00000273)	0.000192 (0.00000124)	0.00014 (0.00000093)	0.000256 (0.0000421)
PCB-180 (2,2',3,4,4',5,5'-HpCB)	0.0014 (0.00000281)	---	0.00317 (0.00000288)	0.000964 B (0.00000131)	0.00069 B (0.00000099)	0.00106 C (0.0000421)
PCB-181 (2,2',3,4,4',5,6-HpCB)	U (0.00000331)	---	U (0.00000339)	0.00000294 EMPC J (0.00000155)	U (0.0000012)	U (0.0000421)
PCB-182 (2,2',3,4,4',5,6'-HpCB)	0.0000141 EMPC J (0.00000321)	---	U (0.0000033)	0.00000418 EMPC J (0.0000015)	0.0000033 EMPC J (0.0000011)	U (0.0000421)
PCB-183 (2,2',3,4,4',5',6-HpCB)	0.000377 (0.00000329)	---	0.000896 (0.00000337)	0.000274 (0.00000154)	0.0002 (0.0000012)	0.00033 C (0.0000421)
PCB-185 (2,2',3,4,5,5',6-HpCB)	0.000377 (0.00000329)	---	0.000896 (0.00000337)	0.000274 (0.00000154)	0.0002 (0.0000012)	0.00033 C183 (0.0000421)
PCB-187 (2,2',3,4',5,5',6-HpCB)	0.00201 (0.00000308)	---	0.00443 (0.00000315)	0.000973 S (0.00000144)	0.00053 (0.0000011)	0.00164 (0.0000421)
PCB-188 (2,2',3,4',5,6,6'-HpCB)	U (0.00000233)	---	U (0.00000242)	U (0.00000107)	U (0.00000084)	U (0.0000421)
PCB-189 (2,3,3',4,4',5,5'-HpCB)	0.00000992 EMPC J (0.00000132)	---	0.0000232 J (0.0000017)	UB (0.000000917)	0.0000033 EMPC J (0.00000092)	0.00000984 EMPC J (0.0000421)
PCB-190 (2,3,3',4,4',5,6-HpCB)	0.000059 EMPC (0.00000256)	---	0.000165 (0.00000263)	UB (0.0000012)	0.000027 J (0.0000009)	0.0000589 (0.0000421)
PCB-191 (2,3,3',4,4',5',6-HpCB)	0.0000209 J (0.00000252)	---	0.0000452 (0.00000258)	UB (0.00000118)	0.0000071 J (0.00000089)	0.0000129 J (0.0000421)
PCB-193 (2,3,3',4',5,5',6-HpCB)	0.0014 (0.00000281)	---	0.00317 (0.00000288)	0.000964 B (0.00000131)	0.00069 B (0.00000099)	0.00106 C180 (0.0000421)
PCB-128 (2,2',3,3',4,4'-HxCB)	0.000235 (0.00000291)	---	0.000699 (0.00000364)	0.000129 (0.00000137)	0.000093 (0.0000013)	0.000179 C (0.0000421)
PCB-129 (2,2',3,3',4,5-HxCB)	0.00142 B (0.00000301)	---	0.00473 B (0.00000377)	0.000962 B (0.00000142)	0.00077 B (0.0000013)	0.00117 C (0.0000421)
PCB-130 (2,2',3,3',4,5'-HxCB)	0.0000853 (0.00000388)	---	0.000224 (0.00000487)	0.0000491 (0.00000183)	0.000033 EMPC J (0.0000017)	0.0000647 EMPC (0.0000421)
PCB-131 (2,2',3,3',4,6-HxCB)	0.0000238 J (0.00000398)	---	0.0000622 (0.00000498)	0.0000125 J (0.00000188)	0.0000094 J (0.0000018)	0.0000172 J (0.0000421)
PCB-132 (2,2',3,3',4,6'-HxCB)	0.000536 (0.00000379)	---	0.00163 (0.00000474)	0.000342 (0.00000179)	0.00029 (0.0000017)	---
PCB-133 (2,2',3,3',5,5'-HxCB)	0.0000288 JQ (0.00000365)	---	0.0000694 (0.00000457)	0.0000166 J (0.00000172)	0.000013 J (0.0000016)	---
PCB-134 (2,2',3,3',5,6-HxCB)	0.000105 (0.00000389)	---	0.000263 (0.00000487)	0.0000568 (0.00000183)	0.000045 (0.0000017)	0.0000897 C (0.0000421)
PCB-135 (2,2',3,3',5,6'-HxCB)	0.000617 (0.00000651)	---	0.00118 (0.0000033)	0.000397 (0.00000198)	0.00034 (0.0000018)	0.000491 C (0.0000421)
PCB-136 (2,2',3,3',6,6'-HxCB)	0.000256 (0.00000478)	---	0.000503 (0.00000243)	0.00016 (0.00000145)	0.00014 (0.0000013)	0.000208 (0.0000421)
PCB-137 (2,2',3,4,4',5-HxCB)	0.0000547 (0.00000335)	---	0.000173 (0.0000042)	0.0000362 J (0.00000158)	0.000024 JQ (0.0000015)	0.0000459 (0.0000421)
PCB-138 (2,2',3,4,4',5'-HxCB)	0.00142 B (0.00000301)	---	0.00473 B (0.00000377)	0.000962 B (0.00000142)	0.00077 B (0.0000013)	---
PCB-139 (2,2',3,4,4',6-HxCB)	0.0000237 EMPC J (0.00000333)	---	0.0000673 (0.00000417)	0.0000135 EMPC J (0.00000157)	0.00001 EMPC J (0.0000015)	0.0000196 EMPC J (0.0000421)
PCB-140 (2,2',3,4,4',6'-HxCB)	0.0000237 EMPC J (0.00000333)	---	0.0000673 (0.00000417)	0.0000135 EMPC J (0.00000157)	0.00001 EMPC J (0.0000015)	0.0000196 EMPC J (0.0000421)
PCB-141 (2,2',3,4,5,5'-HxCB)	0.000331 (0.00000347)	---	0.00103 (0.00000434)	0.000207 (0.00000164)	0.00017 (0.0000015)	0.000266 (0.0000421)
PCB-143 (2,2',3,4,5,6'-HxCB)	0.000105 (0.00000389)	---	0.000263 (0.00000487)	0.0000568 (0.00000183)	0.000045 (0.0000017)	0.0000897 C134 (0.0000421)
PCB-144 (2,2',3,4,5',6-HxCB)	0.0000957 (0.00000604)	---	0.000166 (0.00000307)	0.0000542 (0.00000183)	0.000044 (0.0000016)	0.0000638 (0.0000421)
PCB-146 (2,2',3,4',5,5'-HxCB)	0.000195 (0.00000316)	---	0.00056 (0.00000396)	0.000129 (0.00000149)	0.000099 (0.0000014)	0.00017 (0.0000421)
PCB-147 (2,2',3,4',5,6-HxCB)	0.00126 B (0.00000323)	---	0.00394 (0.00000405)	0.000836 B (0.00000153)	0.00073 B (0.0000014)	0.00107 C (0.0000421)
PCB-148 (2,2',3,4',5,6'-HxCB)	U (0.00000639)	---	U (0.00000324)	U (0.00000194)	U (0.0000017)	U (0.0000421)
PCB-149 (2,2',3,4',5',6-HxCB)	0.00126 B (0.00000323)	---	0.00394 (0.00000405)	0.000836 B (0.00000153)	0.00073 B (0.0000014)	0.00107 C147 (0.0000421)
PCB-150 (2,2',3,4',6,6'-HxCB)	U (0.00000445)	---	U (0.00000226)	0.00000275 J (0.00000135)	U (0.0000012)	U (0.0000421)
PCB-151 (2,2',3,5,5',6-HxCB)	0.000617 (0.00000651)	---	0.00118 (0.0000033)	0.000397 (0.00000198)	0.00034 (0.0000018)	0.000491 C135 (0.0000421)
PCB-152 (2,2',3,5,6,6'-HxCB)	U (0.00000454)	---	U (0.00000231)	U (0.00000138)	U (0.0000012)	U (0.0000421)
PCB-153 (2,2',4,4',5,5'-HxCB)	0.00118 B (0.0000026)	---	0.00411 (0.00000326)	0.000808 B (0.00000123)	0.00065 B (0.0000011)	0.000969 C (0.0000421)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03
ENVIRON Sample ID	MB-MW-03-20101018	MB-MW-03-20101019	MB-MW-03-20110111	MB-MW-03-20110412	MB-MW-03-20110726	MB-MW-03-20111026
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	10/18/2010	10/19/2010	1/11/2011	4/12/2011	7/26/2011	10/26/2011
Comments						
PCB-154 (2,2',4,4',5,6'-HxCB)	0.0000101 EMPC J (0.00000529)	---	0.000024 J (0.00000269)	0.00001 J (0.00000161)	0.0000063 EMPC J (0.0000014)	0.0000143 J (0.0000421)
PCB-155 (2,2',4,4',6,6'-HxCB)	U (0.00000433)	---	U (0.0000022)	U (0.00000131)	U (0.0000012)	U (0.0000421)
PCB-156 (2,3,3',4,4',5-HxCB)	0.000124 (0.00000311)	---	0.000278 S (0.00000548)	0.0000777 (0.00000147)	0.000047 (0.0000013)	0.0000952 EMPC (0.0000421)
PCB-157 (2,3,3',4,4',5'-HxCB)	0.000124 (0.00000311)	---	0.000278 J (0.00000548)	0.0000777 (0.00000147)	0.000047 (0.0000013)	0.0000952 EMPC (0.0000421)
PCB-158 (2,3,3',4,4',6-HxCB)	0.000153 (0.00000237)	---	0.000436 (0.00000297)	0.0000907 (0.00000112)	0.000071 (0.000001)	0.000117 (0.0000421)
PCB-159 (2,3,3',4,5,5'-HxCB)	0.0000125 J (0.00000255)	---	0.0000394 EMPC J (0.00000319)	UB (0.0000012)	0.0000072 J (0.0000011)	0.00000895 EMPC J (0.0000421)
PCB-160 (2,3,3',4,5,6-HxCB)	0.00142 B (0.00000301)	---	0.00473 B (0.00000377)	0.000962 B (0.00000142)	0.00077 B (0.0000013)	0.00117 C129 (0.0000421)
PCB-162 (2,3,3',4',5,5'-HxCB)	0.0000034 EMPC J (0.00000251)	---	0.00000743 EMPC J (0.00000315)	0.00000304 EMPC J (0.00000119)	U (0.0000011)	0.00000439 EMPC J (0.0000421)
PCB-163 (2,3,3',4',5,6-HxCB)	0.00142 B (0.00000301)	---	0.00473 B (0.00000377)	0.000962 B (0.00000142)	0.00077 B (0.0000013)	0.00117 C129 (0.0000421)
PCB-164 (2,3,3',4',5',6-HxCB)	0.0001 (0.00000265)	---	0.000301 (0.00000332)	0.0000626 (0.00000125)	0.000052 (0.0000012)	0.0000798 (0.0000421)
PCB-166 (2,3,4,4',5,6-HxCB)	0.000235 (0.00000291)	---	0.000699 (0.00000364)	0.000129 (0.00000137)	0.000093 (0.0000013)	0.000179 C128 (0.0000421)
PCB-167 (2,3',4,4',5,5'-HxCB)	0.0000481 (0.00000191)	---	0.000106 (0.00000201)	0.0000275 J (0.000000932)	0.000016 EMPC J (0.00000087)	0.0000383 J (0.0000421)
PCB-168 (2,3',4,4',5',6-HxCB)	0.00118 B (0.0000026)	---	0.00411 (0.00000326)	0.000808 B (0.00000123)	0.00065 B (0.0000011)	0.000969 C153 (0.0000421)
PCB-169 (3,3',4,4',5,5'-HxCB)	0.000102 EMPC (0.000002)	---	U (0.00000211)	U (0.000000911)	0.000082 EMPC (0.00000088)	U (0.0000421)
PCB-206 (2,2',3,3',4,4',5,5',6-NoCB)	0.0116 (0.00000335)	---	0.032 (0.00000338)	0.00972 (0.00000191)	0.007 (0.0000013)	0.0169 (0.0000421)
PCB-207 (2,2',3,3',4,4',5,6,6'-NoCB)	0.000987 (0.00000222)	---	0.00209 J (0.00000219)	0.000768 (0.00000135)	0.00055 (0.00000091)	0.00134 (0.0000421)
PCB-208 (2,2',3,3',4,5,5',6,6'-NoCB)	0.00441 (0.00000221)	---	0.0124 (0.00000215)	0.00357 (0.00000139)	0.0027 (0.00000096)	0.00669 (0.0000421)
PCB-194 (2,2',3,3',4,4',5,5'-OcCB)	0.00203 (0.00000273)	---	0.00382 (0.00000281)	0.00123 (0.0000012)	0.0009 (0.0000011)	0.00157 (0.0000421)
PCB-195 (2,2',3,3',4,4',5,6-OcCB)	0.000141 (0.00000297)	---	0.000308 (0.00000305)	0.0000824 (0.0000013)	0.000056 (0.0000012)	0.000135 (0.0000421)
PCB-196 (2,2',3,3',4,4',5,6'-OcCB)	0.000655 (0.0000046)	---	0.00165 (0.00000348)	0.000484 (0.00000169)	0.00039 (0.0000016)	---
PCB-197 (2,2',3,3',4,4',6,6'-OcCB)	0.0000261 J (0.00000342)	---	0.0000439 (0.00000259)	UB (0.00000125)	0.0000017 EMPC J (0.0000012)	0.0000255 J (0.0000421)
PCB-198 (2,2',3,3',4,5,5',6-OcCB)	0.00686 (0.00000475)	---	0.00401 J (0.00000359)	0.0051 (0.00000174)	0.0034 J (0.0000016)	0.0058 C (0.0000421)
PCB-199 (2,2',3,3',4,5,5',6'-OcCB)	0.00686 (0.00000475)	---	0.00401 J (0.00000359)	0.0051 (0.00000174)	0.0034 (0.0000016)	0.000303 (0.0000421)
PCB-200 (2,2',3,3',4,5,6,6'-OcCB)	0.000271 (0.00000336)	---	0.000599 (0.00000254)	0.000195 (0.00000123)	0.00013 S (0.0000011)	0.000438 (0.0000421)
PCB-201 (2,2',3,3',4,5',6,6'-OcCB)	0.000425 (0.00000325)	---	0.00102 (0.00000245)	0.00031 (0.00000119)	0.00027 (0.0000011)	0.0058 C198 (0.0000421)
PCB-202 (2,2',3,3',5,5',6,6'-OcCB)	0.00196 (0.00000366)	---	0.00526 (0.00000276)	0.00153 (0.00000134)	0.0014 (0.0000012)	0.00224 (0.0000421)
PCB-203 (2,2',3,4,4',5,5',6-OcCB)	0.00456 (0.00000424)	---	0.0124 (0.00000321)	0.00377 (0.00000155)	0.0033 (0.0000014)	0.00482 (0.0000421)
PCB-204 (2,2',3,4,4',5,6,6'-OcCB)	U (0.00000356)	---	U (0.00000269)	U (0.0000013)	U (0.0000012)	U (0.0000421)
PCB-205 (2,3,3',4,4',5,5',6-OcCB)	0.0000189 J (0.0000023)	---	0.0000299 J (0.00000236)	0.000012 J (0.00000101)	0.0000075 EMPC J (0.00000094)	0.0000137 J (0.0000421)
PCB-24/27	---	---	---	---	---	0.0000398 J (0.0000421)
PCB-42/59	---	---	---	---	---	0.00024 (0.0000421)
PCB-52/69	---	---	---	---	---	0.00157 B (0.0000421)
PCB-61/70	---	---	---	---	---	0.000957 BC (0.0000421)
PCB-90/101	---	---	---	---	---	0.0011 C (0.0000421)
PCB-107/109	---	---	---	---	---	0.0000392 EMPC J (0.0000421)
PCB-132/161	---	---	---	---	---	0.000437 (0.0000421)
PCB-133/142	---	---	---	---	---	0.0000218 EMPC J (0.0000421)
PCB-138/163/164	---	---	---	---	---	0.00117 C129 (0.0000421)
PCB-196/203	---	---	---	---	---	0.000674 (0.0000421)
PCB-082 (2,2',3,3',4-PeCB)	0.000255 (0.00000629)	---	0.00027 (0.00000332)	0.000111 (0.00000173)	0.000092 (0.0000017)	0.000143 (0.0000421)
PCB-083 (2,2',3,3',5-PeCB)	0.000826 (0.00000529)	---	0.00126 (0.00000279)	0.00043 (0.00000145)	0.00036 (0.0000014)	0.000496 C (0.0000421)
PCB-084 (2,2',3,3',6-PeCB)	0.000659 (0.00000601)	---	0.000863 (0.00000317)	0.000351 (0.00000165)	0.00033 (0.0000016)	0.00044 (0.0000421)
PCB-085 (2,2',3,4,4'-PeCB)	0.000276 (0.00000435)	---	0.000352 (0.0000023)	0.000135 (0.0000012)	0.0001 (0.0000011)	0.000153 C (0.0000421)
PCB-086 (2,2',3,4,5-PeCB)	0.00114 (0.00000446)	---	0.00146 (0.00000235)	0.00057 B (0.00000122)	0.00046 (0.0000012)	0.00065 C (0.0000421)
PCB-087 (2,2',3,4,5'-PeCB)	0.00114 (0.00000446)	---	0.00146 (0.00000235)	0.00057 B (0.00000122)	0.00046 (0.0000012)	0.00065 C86 (0.0000421)
PCB-088 (2,2',3,4,6-PeCB)	0.000273 (0.00000536)	---	0.000369 (0.00000283)	0.000146 (0.00000147)	0.00013 (0.0000014)	0.000184 C (0.0000421)
PCB-089 (2,2',3,4,6'-PeCB)	0.0000301 J (0.00000582)	---	0.00003 J (0.00000307)	0.0000108 EMPC J (0.0000016)	0.000011 EMPC J (0.0000015)	0.0000243 EMPC J (0.0000421)
PCB-090 (2,2',3,4',5-PeCB)	0.00171 B (0.00000453)	---	0.00285 B (0.00000239)	0.000966 B (0.00000125)	0.00083 B (0.0000012)	---
PCB-097 (2,2',3,4',5'-PeCB)	0.00114 (0.00000446)	---	0.00146 (0.00000235)	0.00057 B (0.00000122)	0.00046 (0.0000012)	0.00065 C86 (0.0000421)
PCB-091 (2,2',3,4',6-PeCB)	0.000273 (0.00000536)	---	0.000369 (0.00000283)	0.000146 (0.00000147)	0.00013 (0.0000014)	0.000184 C88 (0.0000421)
PCB-098 (2,2',3,4',6'-PeCB)	0.0000829 (0.00000501)	---	0.0000873 EMPC (0.00000264)	0.0000313 EMPC J (0.00000138)	0.000035 EMPC J (0.0000013)	0.0000589 C (0.0000421)
PCB-092 (2,2',3,5,5'-PeCB)	0.000296 (0.00000515)	---	0.00046 (0.00000272)	0.000172 (0.00000141)	0.00015 (0.0000014)	0.000198 (0.0000421)
PCB-093 (2,2',3,5,6-PeCB)	0.0000195 EMPC J (0.00000517)	---	0.000035 EMPC J (0.00000273)	UB (0.00000142)	0.0000065 EMPC J (0.0000014)	0.00000775 EMPC J (0.0000421)
PCB-094 (2,2',3,5,6'-PeCB)	0.0000138 J (0.00000582)	---	0.0000118 J (0.00000307)	UB (0.0000016)	0.0000069 J (0.0000015)	0.0000101 J (0.0000421)
PCB-095 (2,2',3,5',6-PeCB)	0.00197 (0.00000548)	---	0.00293 (0.00000289)	0.00118 (0.0000015)	0.0011 (0.0000014)	0.00142 (0.0000421)
PCB-096 (2,2',3,6,6'-PeCB)	0.0000207 J (0.00000435)	---	0.0000242 J (0.0000023)	UB (0.0000012)	0.0000087 EMPC J (0.0000011)	0.0000175 J (0.0000421)
PCB-099 (2,2',4,4',5-PeCB)	0.000826 (0.00000529)	---	0.00126 (0.00000279)	0.00043 (0.00000145)	0.00036 (0.0000014)	0.000496 C83 (0.0000421)
PCB-100 (2,2',4,4',6-PeCB)	0.0000195 EMPC J (0.00000517)	---	0.000035 EMPC J (0.00000273)	UB (0.00000142)	0.0000065 EMPC J (0.0000014)	0.00000775 EMPC J (0.0000421)
PCB-101 (2,2',4,5,5'-PeCB)	0.00171 B (0.00000453)	---	0.00285 B (0.00000239)	0.000966 B (0.00000125)	0.00083 B (0.0000012)	0.0011 C90 (0.0000421)
PCB-102 (2,2',4,5,6'-PeCB)	0.0000829 (0.00000501)	---	0.0000873 Q (0.00000264)	0.0000313 JQ (0.00000138)	0.000035 JQ (0.0000013)	0.0000589 C98 (0.0000421)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03
ENVIRON Sample ID	MB-MW-03-20101018	MB-MW-03-20101019	MB-MW-03-20110111	MB-MW-03-20110412	MB-MW-03-20110726	MB-MW-03-20111026
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	10/18/2010	10/19/2010	1/11/2011	4/12/2011	7/26/2011	10/26/2011
Comments						
PCB-103 (2,2',4,5',6-PeCB)	0.0000125 EMPC J (0.0000051)	---	0.0000109 EMPC J (0.00000269)	UB (0.0000014)	0.000006 J (0.0000013)	0.00000784 EMPC J (0.0000421)
PCB-104 (2,2',4,6,6'-PeCB)	U (0.00000388)	---	U (0.00000205)	0.00000215 EMPC J (0.00000106)	U (0.000001)	U (0.0000421)
PCB-105 (2,3,3',4,4'-PeCB)	0.000304 (0.00000135)	---	0.000672 (0.00000154)	0.000202 BS (0.000000737)	0.00012 (0.00000089)	0.000243 (0.0000421)
PCB-108 (2,3,3',4,5'-PeCB)	0.0000437 (0.0000015)	---	0.0000762 (0.00000165)	0.0000253 BJ (0.000000833)	0.000015 J (0.00000091)	0.0000332 J (0.0000421)
PCB-109 (2,3,3',4,6-PeCB)	0.00114 (0.00000446)	---	0.00146 (0.00000235)	0.00057 B (0.00000122)	0.00046 (0.0000012)	0.00065 C86 (0.0000421)
PCB-107 (2,3,3',4',5-PeCB)	0.0000612 (0.00000143)	---	0.000114 (0.00000156)	0.0000363 BJ (0.000000792)	0.00002 J (0.00000086)	---
PCB-110 (2,3,3',4',6-PeCB)	0.00212 B (0.00000385)	---	0.00305 B (0.00000203)	0.00108 (0.00000106)	0.00099 B (0.000001)	0.00129 BC (0.0000421)
PCB-111 (2,3,3',5,5'-PeCB)	U (0.00000364)	---	U (0.00000192)	U (0.000001)	U (0.00000096)	U (0.0000421)
PCB-113 (2,3,3',5',6-PeCB)	0.00171 B (0.00000453)	---	0.00285 B (0.00000239)	0.000966 B (0.00000125)	0.00083 B (0.0000012)	0.0011 C90 (0.0000421)
PCB-114 (2,3,4,4',5-PeCB)	0.0000231 J (0.00000138)	---	0.0000387 J (0.00000148)	0.0000119 J (0.000000783)	0.0000052 EMPC J (0.00000081)	---
PCB-115 (2,3,4,4',6-PeCB)	0.00212 B (0.00000385)	---	0.00305 B (0.00000203)	0.00108 (0.00000106)	0.00099 B (0.000001)	0.00129 BC110 (0.0000421)
PCB-116 (2,3,4,5,6-PeCB)	0.000276 (0.00000435)	---	0.000352 (0.0000023)	0.000135 (0.0000012)	0.0001 (0.0000011)	0.000153 C85 (0.0000421)
PCB-117 (2,3,4',5,6-PeCB)	0.000276 (0.00000435)	---	0.000352 (0.0000023)	0.000135 (0.0000012)	0.0001 (0.0000011)	0.000153 C85 (0.0000421)
PCB-118 (2,3',4,4',5-PeCB)	0.000867 B (0.0000014)	---	0.00185 B (0.00000148)	0.000541 (0.000000799)	0.00034 B (0.00000085)	0.000584 EMPC (0.0000421)
PCB-119 (2,3',4,4',6-PeCB)	0.00114 (0.00000446)	---	0.00146 (0.00000235)	0.00057 B (0.00000122)	0.00046 (0.0000012)	0.00065 C86 (0.0000421)
PCB-120 (2,3',4,5,5'-PeCB)	U (0.00000375)	---	U (0.00000198)	U (0.00000103)	U (0.00000099)	U (0.0000421)
PCB-121 (2,3',4,5',6-PeCB)	U (0.00000378)	---	U (0.00000199)	0.00000183 EMPC J (0.00000104)	U (0.00000099)	U (0.0000421)
PCB-122 (2,3,3',4',5'-PeCB)	0.0000174 J (0.0000016)	---	0.000026 JQ (0.00000176)	0.00000647 JQ (0.000000889)	0.0000064 J (0.00000097)	0.0000151 EMPC J (0.0000421)
PCB-123 (2,3',4,4',5'-PeCB)	0.0000129 EMPC J (0.00000144)	---	0.0000308 EMPC J (0.00000163)	0.0000094 BJ (0.000000854)	0.0000065 EMPC J (0.0000009)	0.0000128 EMPC J (0.0000421)
PCB-124 (2,3',4',5,5'-PeCB)	0.0000437 (0.0000015)	---	0.0000762 (0.00000165)	0.0000253 BJ (0.000000833)	0.000015 J (0.00000091)	0.0000332 J (0.0000421)
PCB-125 (2,3',4',5',6-PeCB)	0.00114 (0.00000446)	---	0.00146 (0.00000235)	0.00057 B (0.00000122)	0.00046 (0.0000012)	0.00065 C86 (0.0000421)
PCB-126 (3,3',4,4',5-PeCB)	0.000015 EMPC J (0.00000149)	---	0.0000277 EMPC J (0.0000016)	0.00000225 J (0.000000754)	U (0.00000082)	U (0.0000421)
PCB-127 (3,3',4,5,5'-PeCB)	U (0.00000145)	---	0.00000357 EMPC J (0.00000159)	U (0.000000807)	U (0.00000088)	U (0.0000421)
PCB-040 (2,2',3,3'-TeCB)	0.000811 (0.00000266)	---	0.000941 (0.0000023)	0.000429 B (0.00000102)	0.00039 (0.0000011)	0.000576 C (0.0000421)
PCB-041 (2,2',3,4-TeCB)	0.000811 (0.00000266)	---	0.000941 (0.0000023)	0.000429 B (0.00000102)	0.00039 (0.0000011)	0.000576 C40 (0.0000421)
PCB-042 (2,2',3,4'-TeCB)	0.00033 (0.00000271)	---	0.000391 (0.00000234)	0.00017 B (0.00000104)	0.00016 (0.0000011)	---
PCB-043 (2,2',3,5-TeCB)	0.0000562 (0.00000249)	---	0.0000802 (0.00000215)	0.0000267 BJ (0.000000951)	0.000021 J (0.0000011)	0.0000362 EMPC J (0.0000421)
PCB-044 (2,2',3,5'-TeCB)	0.00144 B (0.00000238)	---	0.002 B (0.00000206)	0.0008 B (0.000000911)	0.00074 B (0.000001)	0.00101 BC (0.0000421)
PCB-045 (2,2',3,6-TeCB)	0.000467 B (0.00000276)	---	0.000526 (0.00000239)	0.000268 (0.00000106)	0.00027 (0.0000012)	0.00036 BC (0.0000421)
PCB-046 (2,2',3,6'-TeCB)	0.000193 (0.00000326)	---	0.000215 (0.00000282)	0.000106 (0.00000125)	0.0001 (0.0000014)	0.000153 (0.0000421)
PCB-047 (2,2',4,4'-TeCB)	0.00144 B (0.00000238)	---	0.002 B (0.00000206)	0.0008 B (0.000000911)	0.00074 B (0.000001)	0.00101 BC44 (0.0000421)
PCB-048 (2,2',4,5-TeCB)	0.000251 (0.00000264)	---	0.000338 (0.00000229)	0.000134 B (0.00000101)	0.00012 (0.0000011)	0.00017 (0.0000421)
PCB-049 (2,2',4,5'-TeCB)	0.000776 B (0.00000219)	---	0.00109 (0.0000019)	0.000441 B (0.000000839)	0.00039 B (0.00000093)	0.000511 BC (0.0000421)
PCB-050 (2,2',4,6-TeCB)	0.000397 (0.00000256)	---	0.000471 (0.00000222)	0.00024 B (0.00000098)	0.00024 (0.0000011)	0.000325 C (0.0000421)
PCB-051 (2,2',4,6'-TeCB)	0.000467 B (0.00000276)	---	0.000526 (0.00000239)	0.000268 (0.00000106)	0.00027 (0.0000012)	0.00036 BC45 (0.0000421)
PCB-052 (2,2',5,5'-TeCB)	0.00241 B (0.00000257)	---	0.00288 B (0.00000222)	0.00131 B (0.000000982)	0.0012 B (0.0000011)	---
PCB-053 (2,2',5,6'-TeCB)	0.000397 (0.00000256)	---	0.000471 (0.00000222)	0.00024 B (0.00000098)	0.00024 (0.0000011)	0.000325 C50 (0.0000421)
PCB-054 (2,2',6,6'-TeCB)	0.0000126 J (0.00000301)	---	0.0000111 JQ (0.00000207)	0.0000105 J (0.0000014)	0.0000088 J (0.0000016)	0.0000137 J (0.0000421)
PCB-055 (2,3,3',4-TeCB)	0.0000222 EMPC J (0.00000206)	---	0.0000353 J (0.00000178)	UB (0.000000789)	0.0000074 J (0.00000087)	0.00000878 EMPC J (0.0000421)
PCB-056 (2,3,3',4'-TeCB)	0.000354 B (0.00000194)	---	0.000521 (0.00000168)	0.00019 B (0.000000742)	0.00016 B (0.00000082)	0.000247 (0.0000421)
PCB-057 (2,3,3',5-TeCB)	0.00000612 J (0.00000197)	---	0.00000225 EMPC J (0.0000017)	UB (0.000000751)	U (0.00000083)	0.00000334 EMPC J (0.0000421)
PCB-058 (2,3,3',5'-TeCB)	U (0.00000196)	---	U (0.00000169)	UB (0.000000747)	0.00000076 EMPC J (0.00000083)	0.00000376 J (0.0000421)
PCB-059 (2,3,3',6-TeCB)	0.000125 B (0.0000019)	---	0.000147 (0.00000164)	0.0000702 B (0.000000725)	0.00006 (0.0000008)	0.0000883 C (0.0000421)
PCB-060 (2,3,4,4'-TeCB)	0.000175 (0.000002)	---	0.000278 (0.00000173)	0.0000958 (0.000000764)	0.000073 (0.00000085)	0.000135 (0.0000421)
PCB-061 (2,3,4,5-TeCB)	0.0015 B (0.0000019)	---	0.00223 B (0.00000164)	0.000782 B (0.000000724)	0.00063 B (0.0000008)	---
PCB-062 (2,3,4,6-TeCB)	0.000125 B (0.0000019)	---	0.000147 (0.00000164)	0.0000702 B (0.000000725)	0.00006 (0.0000008)	0.0000883 C59 (0.0000421)
PCB-063 (2,3,4',5-TeCB)	0.0000312 J (0.00000182)	---	0.0000379 J (0.00000158)	0.0000164 J (0.000000696)	0.00001 J (0.00000077)	0.0000211 J (0.0000421)
PCB-064 (2,3,4',6-TeCB)	0.00052 (0.0000018)	---	0.000641 (0.00000155)	0.000269 B (0.000000686)	0.00025 B (0.00000076)	0.000349 (0.0000421)
PCB-065 (2,3,5,6-TeCB)	0.00144 B (0.00000238)	---	0.002 B (0.00000206)	0.0008 B (0.000000911)	0.00074 B (0.000001)	0.00101 BC44 (0.0000421)
PCB-066 (2,3',4,4'-TeCB)	0.000739 B (0.00000188)	---	0.00111 B (0.00000163)	0.000389 B (0.00000072)	0.00032 B (0.0000008)	0.000498 (0.0000421)
PCB-067 (2,3',4,5-TeCB)	0.000032 J (0.00000177)	---	0.0000356 J (0.00000153)	0.0000161 BJ (0.000000675)	0.0000096 EMPC J (0.00000075)	0.0000167 EMPC J (0.0000421)
PCB-068 (2,3',4,5'-TeCB)	0.00000804 BJ (0.00000178)	---	UB (0.00000154)	UB (0.000000681)	UB (0.00000075)	0.00000557 B (0.0000421)
PCB-069 (2,3',4,6-TeCB)	0.000776 B (0.00000219)	---	0.00109 (0.0000019)	0.000441 B (0.000000839)	0.00039 B (0.00000093)	0.000511 BC49 (0.0000421)
PCB-070 (2,3',4',5-TeCB)	0.0015 B (0.0000019)	---	0.00223 B (0.00000164)	0.000782 B (0.000000724)	0.00063 B (0.0000008)	0.000957 BC61 (0.0000421)
PCB-076 (2,3',4',5'-TeCB)	0.0015 B (0.0000019)	---	0.00223 B (0.00000164)	0.000782 B (0.000000724)	0.00063 B (0.0000008)	0.000957 BC61 (0.0000421)
PCB-071 (2,3',4',6-TeCB)	0.000811 (0.00000266)	---	0.000941 (0.0000023)	0.000429 B (0.00000102)	0.00039 (0.0000011)	0.000576 C40 (0.0000421)
PCB-072 (2,3',5,5'-TeCB)	0.00000867 J (0.00000191)	---	0.00000845 J (0.00000165)	UB (0.000000731)	0.0000029 EMPC J (0.00000081)	0.00000589 EMPC J (0.0000421)
PCB-073 (2,3',5',6-TeCB)	0.0000562 (0.00000249)	---	0.0000802 (0.00000215)	0.0000267 BJ (0.000000951)	0.000021 J (0.0000011)	0.0000362 EMPC J (0.0000421)
PCB-074 (2,4,4',5-TeCB)	0.0015 B (0.0000019)	---	0.00223 B (0.00000164)	0.000782 B (0.000000724)	0.00063 B (0.0000008)	0.000957 BC61 (0.0000421)
PCB-075 (2,4,4',6-TeCB)	0.000125 B (0.0000019)	---	0.000147 (0.00000164)	0.0000702 B (0.000000725)	0.00006 (0.0000008)	0.0000883 C59 (0.0000421)
PCB-077 (3,3',4,4'-TeCB)	0.0000699 (0.00000186)	---	0.0000874 (0.00000165)	0.0000313 BJ (0.00000071)	0.000021 J (0.00000081)	0.0000391 J (0.0000421)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03
ENVIRON Sample ID	MB-MW-03-20101018	MB-MW-03-20101019	MB-MW-03-20110111	MB-MW-03-20110412	MB-MW-03-20110726	MB-MW-03-20111026
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	10/18/2010	10/19/2010	1/11/2011	4/12/2011	7/26/2011	10/26/2011
Comments						
PCB-078 (3,3',4,5-TeCB)	U (0.00000203)	---	0.000008 J (0.00000176)	U (0.000000776)	U (0.00000086)	U (0.0000421)
PCB-079 (3,3',4,5'-TeCB)	0.0000204 J (0.00000178)	---	0.0000272 J (0.00000154)	0.00000849 J (0.000000681)	0.0000032 EMPC J (0.00000076)	0.00000664 J (0.0000421)
PCB-081 (3,4,4',5-TeCB)	U (0.00000182)	---	0.00000298 EMPC J (0.00000154)	UB (0.000000698)	0.0000014 EMPC J (0.00000075)	U (0.0000421)
PCB-016 (2,2',3-TrCB)	0.00121 (0.00000552)	---	0.00118 (0.00000347)	0.000746 B (0.00000194)	0.00081 (0.000002)	0.001 (0.0000421)
PCB-017 (2,2',4-TrCB)	0.000927 (0.0000046)	---	0.00107 (0.00000289)	0.00064 B (0.00000162)	0.00068 (0.0000017)	0.000854 (0.0000421)
PCB-018 (2,2',5-TrCB)	0.00266 B (0.00000407)	---	0.00278 B (0.00000256)	0.0018 B (0.00000143)	0.0019 B (0.0000015)	0.00235 BC (0.0000632)
PCB-019 (2,2',6-TrCB)	0.000741 (0.00000564)	---	0.000694 (0.00000354)	0.000493 (0.00000198)	0.00053 (0.0000021)	0.000694 (0.0000421)
PCB-020 (2,3,3'-TrCB)	0.00174 B (0.00000111)	---	0.00227 B (0.00000167)	0.00106 B (0.000000658)	0.00093 B (0.00000082)	0.00131 BC (0.0000421)
PCB-021 (2,3,4-TrCB)	0.00089 B (0.00000111)	---	0.00114 B (0.00000167)	0.000537 B (0.000000659)	0.00047 B (0.00000082)	0.000688 BC (0.0000421)
PCB-022 (2,3,4'-TrCB)	0.000576 B (0.00000113)	---	0.000746 B (0.0000017)	0.000351 B (0.00000067)	0.00031 B (0.00000083)	0.000459 B (0.0000421)
PCB-023 (2,3,5-TrCB)	0.00000254 J (0.00000115)	---	0.00000228 EMPC J (0.00000173)	UB (0.000000683)	0.00000094 EMPC J (0.00000085)	U (0.0000421)
PCB-024 (2,3,6-TrCB)	0.0000251 EMPC J (0.00000385)	---	0.0000441 (0.00000242)	0.0000271 J (0.00000135)	0.000026 EMPC J (0.0000014)	---
PCB-025 (2,3',4-TrCB)	0.000137 (0.00000103)	---	0.000178 (0.00000154)	0.0000856 B (0.000000609)	0.000077 (0.00000076)	0.000107 (0.0000421)
PCB-026 (2,3',5-TrCB)	0.000342 B (0.00000109)	---	0.00042 (0.00000164)	0.000211 B (0.000000647)	0.00019 B (0.0000008)	0.000271 C (0.0000421)
PCB-027 (2,3',6-TrCB)	0.000213 (0.00000333)	---	0.000216 (0.00000209)	0.000143 (0.00000117)	0.00015 (0.0000012)	0.00019 (0.0000421)
PCB-028 (2,4,4'-TrCB)	0.00174 B (0.00000111)	---	0.00227 B (0.00000167)	0.00106 B (0.000000658)	0.00093 B (0.00000082)	0.00131 BC20 (0.0000421)
PCB-030 (2,4,6-TrCB)	0.00266 B (0.00000407)	---	0.00278 B (0.00000256)	0.0018 B (0.00000143)	0.0019 B (0.0000015)	0.00235 BC18 (0.0000632)
PCB-029 (2,4,5-TrCB)	0.000342 B (0.00000109)	---	0.00042 (0.00000164)	0.000211 B (0.000000647)	0.00019 B (0.0000008)	0.000271 C26 (0.0000421)
PCB-031 (2,4',5-TrCB)	0.00161 B (0.00000108)	---	0.00201 B (0.00000163)	0.000957 B (0.000000642)	0.00088 B (0.0000008)	0.00123 B (0.0000421)
PCB-032 (2,4',6-TrCB)	0.000842 (0.00000326)	---	0.000936 (0.00000205)	0.000534 (0.00000115)	0.00057 (0.0000012)	0.000704 (0.0000421)
PCB-033 (2,3',4'-TrCB)	0.00089 B (0.00000111)	---	0.00114 B (0.00000167)	0.000537 B (0.000000659)	0.00047 B (0.00000082)	0.000688 BC21 (0.0000421)
PCB-034 (2,3',5'-TrCB)	0.00000807 EMPC J (0.00000114)	---	0.00000924 J (0.0000017)	UB (0.000000673)	0.0000029 EMPC J (0.00000083)	0.00000514 EMPC J (0.0000421)
PCB-035 (3,3',4-TrCB)	0.0000177 J (0.00000117)	---	0.0000224 J (0.00000175)	UB (0.000000691)	0.0000056 J (0.00000086)	0.0000152 J (0.0000421)
PCB-036 (3,3',5-TrCB)	U (0.00000113)	---	0.0000302 J (0.00000169)	UB (0.000000668)	U (0.00000083)	U (0.0000421)
PCB-037 (3,4,4'-TrCB)	0.000338 B (0.00000116)	---	0.000449 (0.00000174)	0.000193 B (0.000000685)	0.00016 (0.00000085)	0.000268 (0.0000421)
PCB-038 (3,4,5-TrCB)	U (0.00000119)	---	U (0.00000178)	UB (0.000000705)	U (0.00000087)	U (0.0000421)
PCB-039 (3,4',5-TrCB)	U (0.00000106)	---	U (0.00000159)	UB (0.000000626)	0.0000026 EMPC J (0.00000078)	0.00000507 EMPC J (0.0000421)
PCB Aroclors						
PCBs (total)	---	U (0.00296)	0.2683 J (0.00311)	U (0.0189)	U (0.0028)	U (0.51)
Aroclor-1016	---	U (0.00254)	UJ (0.00267)	U (0.00262)	U (0.0024)	U (0.51)
Aroclor-1242	---	U (0.00188)	UJ (0.00197)	U (0.00193)	U (0.0018)	U (0.51)
Aroclor-1248	---	U (0.0023)	0.0663 J (0.00241)	U (0.00236)	U (0.0022)	U (0.51)
Aroclor-1260	---	U (0.00137)	UJ (0.00144)	U (0.00141)	U (0.0013)	U (0.51)
Aroclor-1268	---	U (0.00274)	0.202 J (0.00288)	U (0.00283)	U (0.0026)	U (0.51)
CDDF						
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	---	---	0.00000113 EMPC J (0.000000484)	---	U (0.00000053)	---
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	---	---	UB (0.000000397)	---	U (0.00000049)	---
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	---	---	UB (0.000000795)	---	UB (0.00000081)	---
Octachlorodibenzo-p-dioxin	---	---	0.0000761 EMPC J (0.000000621)	---	UB (0.0000012)	---
2,3,7,8-Tetrachlorodibenzo-p-dioxin	---	---	U (0.00000029)	---	U (0.00000041)	---
1,2,3,7,8-Pentachlorodibenzofuran	---	---	UB (0.000000424)	---	U (0.00000047)	---
1,2,3,4,7,8-Hexachlorodibenzofuran	---	---	UB (0.000000404)	---	UB (0.00000043)	---
1,2,3,4,6,7,8-Heptachlorodibenzofuran	---	---	UB (0.000000314)	---	UB (0.0000006)	---
Octachlorodibenzofuran	---	---	0.0000122 BJQ (0.000000445)	---	0.0000059 BJQ (0.00000093)	---

Notes:
1 All concentrations are presented in ug/L (ppb).
2 Only compounds with at least one detection are shown.

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-04	MB-MW-04	MB-MW-04
ENVIRON Sample ID	MB-MW-03-20120424	MB-MW-03-20121017	MB-MW-03-20130410	MB-MW-03-20131009	MB-MW-04-20100729	DUP-20100729	MB-MW-04-20101019
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	4/24/2012	10/17/2012	4/10/2013	10/9/2013	7/29/2010	7/29/2010	10/19/2010
Comments						Field Duplicate	
SVOC							
Acenaphthene	1.2 (0.2)	0.44 J (2.3)	U (2.2)	0.24 J (1.9)	4.32 (0.015)	4.41 (0.0151)	---
Acenaphthylene	U (0.2)	U (2.3)	U (2.2)	U (1.9)	0.301 (0.0158)	0.318 (0.016)	---
Acetophenone	U (1)	U (11)	U (11)	U (9.6)	0.334 J (0.0832)	U (0.084)	---
Anthracene	0.37 (0.2)	U (2.3)	U (2.2)	U (1.9)	0.801 (0.016)	0.867 (0.0162)	---
Benzaldehyde	U (1)	U (11)	8.6 J (11)	U (9.6)	1.26 (0.156)	1.26 (0.158)	---
Benzo(a)anthracene	0.13 B (0.2)	U (2.3)	U (2.2)	U (1.9)	U (0.0153)	U (0.0154)	---
Benzo(a)pyrene	0.048 B (0.2)	U (2.3)	U (2.2)	U (1.9)	U (0.0139)	U (0.0141)	---
Benzo(b)fluoranthene	0.67 B (0.2)	U (2.3)	U (2.2)	U (1.9)	U (0.0163)	U (0.0165)	---
Benzo(g,h,i)perylene	0.08 B (0.2)	U (2.3)	U (2.2)	U (1.9)	U (0.0157)	U (0.0159)	---
Benzo(k)fluoranthene	U (0.2)	U (2.3)	U (2.2)	U (1.9)	U (0.0569)	U (0.0574)	---
Biphenyl	0.14 B (1)	U (11)	U (11)	U (9.6)	U (0.0432)	U (0.0436)	---
bis(2-Chloroethyl) ether	U (0.2)	U (2.3)	U (2.2)	U (1.9)	U (0.0261)	U (0.0264)	---
bis(2-Ethylhexyl)phthalate	U (2)	U (23)	U (22)	U (19)	U (1.3)	5.35 (1.32)	---
Butylbenzylphthalate	U (1)	U (11)	U (11)	U (9.6)	U (0.148)	U (0.149)	---
Caprolactam	U (5.1)	U (57)	U (56)	15 J (48)	U (1.24)	U (1.25)	---
Carbazole	0.28 (0.2)	U (2.3)	U (2.2)	U (1.9)	19.5 J (0.0164)	11.5 J (0.0166)	---
4-Chloroaniline	U (1)	U (11)	U (11)	U (9.6)	0.119 J (0.092)	U (0.0929)	---
2-Chlorophenol	UL (1)	U (11)	U (11)	U (9.6)	U (0.172)	U (0.173)	---
4-Chlorophenyl-phenyl ether	U (1)	U (11)	U (11)	U (9.6)	U (0.0523)	U (0.0528)	---
Chrysene	0.15 B (0.2)	U (2.3)	U (2.2)	U (1.9)	U (0.0146)	U (0.0147)	---
Dibenz(a,h)anthracene	0.51 B (0.2)	U (2.3)	U (2.2)	U (1.9)	U (0.0161)	U (0.0163)	---
Dibenzofuran	0.15 J (1)	U (11)	U (11)	U (9.6)	0.307 J (0.0642)	0.258 J (0.0648)	---
2,4-Dichlorophenol	UL (0.2)	U (2.3)	U (2.2)	U (1.9)	U (0.0347)	U (0.0351)	---
Diethylphthalate	U (1)	U (11)	U (11)	U (9.6)	0.501 J (0.152)	U (0.153)	---
2,4-Dimethylphenol	UL (1)	U (11)	1.3 J (11)	U (9.6)	0.332 J (0.0886)	0.265 J (0.0895)	---
Dimethylphthalate	U (1)	U (11)	U (11)	U (9.6)	U (0.0796)	U (0.0803)	---
Di-n-butylphthalate	0.14 J (1)	U (11)	U (11)	U (9.6)	U (0.13)	U (0.131)	---
Di-n-octylphthalate	U (1)	U (11)	U (11)	U (9.6)	U (0.215)	U (0.217)	---
Fluoranthene	1.1 (0.2)	0.83 J (2.3)	U (2.2)	0.37 J (1.9)	U (0.0168)	0.263 (0.017)	---
Fluorene	0.43 (0.2)	U (2.3)	U (2.2)	U (1.9)	2.87 (0.0225)	3.19 (0.0227)	---
Indeno(1,2,3-cd)pyrene	0.38 B (0.2)	U (2.3)	U (2.2)	U (1.9)	U (0.0207)	U (0.0209)	---
Isophorone	U (1)	U (11)	U (11)	U (9.6)	U (0.067)	U (0.0676)	---
2-Methylnaphthalene	0.39 B (0.2)	U (2.3)	U (2.2)	U (1.9)	0.167 J (0.0127)	0.151 J (0.0128)	---
2-Methylphenol	UL (1)	U (11)	U (11)	U (9.6)	0.151 J (0.0896)	0.152 J (0.0905)	---
3&4-Methylphenol	UL (1)	U (11)	3.9 J (11)	U (9.6)	---	---	---
4-Methylphenol	---	---	---	---	0.804 J (0.0938)	0.904 J (0.0947)	---
Naphthalene	3.7 B (0.2)	U (2.3)	U (2.2)	U (1.9)	1.04 (0.0146)	1.06 (0.0147)	---
N-Nitrosodiphenylamine	U (1)	U (11)	U (11)	U (9.6)	UJ (0.0887)	0.619 J (0.0896)	---
Pentachlorophenol	UL (1)	U (11)	U (11)	U (9.6)	U (0.069)	U (0.0696)	---
Phenanthrene	0.43 (0.2)	U (2.3)	U (2.2)	U (1.9)	0.728 (0.0444)	0.765 (0.0448)	---
Phenol	UL (0.2)	U (2.3)	U (2.2)	U (1.9)	6.53 (0.0604)	7.02 (0.061)	---
Pyrene	0.54 (0.2)	0.68 J (2.3)	U (2.2)	U (1.9)	0.163 J (0.0163)	0.137 J (0.0165)	---
PCB Congeners							
13C12-PCB 114	---	---	---	---	---	---	---
PCB-001 (2-CB)	---	---	---	---	0.0175 (0.000000828)	0.0155 (0.000000951)	0.014 B (0.00000137)
PCB-002 (3-CB)	---	---	---	---	0.000455 (0.000000902)	0.000404 (0.00000107)	0.000187 (0.00000147)
PCB-003 (4-CB)	---	---	---	---	0.00235 (0.000000984)	0.00214 (0.00000121)	0.00147 B (0.00000158)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-04	MB-MW-04	MB-MW-04
ENVIRON Sample ID	MB-MW-03-20120424	MB-MW-03-20121017	MB-MW-03-20130410	MB-MW-03-20131009	MB-MW-04-20100729	DUP-20100729	MB-MW-04-20101019
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	4/24/2012	10/17/2012	4/10/2013	10/9/2013	7/29/2010	7/29/2010	10/19/2010
Comments						Field Duplicate	
PCB-209 (DeCB)	---	---	---	---	0.000119 (0.00000113)	0.00012 (0.000000929)	0.000197 (0.00000239)
PCB-004 (2,2'-DiCB)	---	---	---	---	0.0383 B (0.00000425)	0.0362 B (0.00000391)	0.0433 B (0.00000961)
PCB-005 (2,3-DiCB)	---	---	---	---	0.000101 Q (0.00000276)	0.000103 (0.00000264)	0.000114 (0.00000647)
PCB-006 (2,3'-DiCB)	---	---	---	---	0.00514 (0.00000259)	0.00492 (0.00000248)	0.00544 B (0.00000608)
PCB-007 (2,4-DiCB)	---	---	---	---	0.000266 (0.00000266)	0.000257 (0.00000255)	0.000301 B (0.00000625)
PCB-008 (2,4'-DiCB)	---	---	---	---	0.0117 B (0.00000254)	0.0116 B (0.00000243)	0.0131 B (0.00000595)
PCB-009 (2,5-DiCB)	---	---	---	---	0.000528 (0.00000268)	0.000502 (0.00000256)	0.000561 B (0.00000628)
PCB-010 (2,6-DiCB)	---	---	---	---	0.000937 (0.00000288)	0.000841 (0.00000276)	0.000893 (0.00000675)
PCB-011 (3,3'-DiCB)	---	---	---	---	UB (0.00000255)	UB (0.00000244)	0.000235 B (0.00000598)
PCB-012 (3,4-DiCB)	---	---	---	---	0.000419 (0.00000261)	0.000401 (0.0000025)	0.00046 (0.00000613)
PCB-013 (3,4'-DiCB)	---	---	---	---	0.000419 (0.00000261)	0.000401 (0.0000025)	0.00046 (0.00000613)
PCB-014 (3,5-DiCB)	---	---	---	---	U (0.00000225)	U (0.00000216)	U (0.00000529)
PCB-015 (4,4'-DiCB)	---	---	---	---	0.00227 (0.00000239)	0.00212 (0.00000234)	0.00232 B (0.00000573)
PCB-170 (2,2',3,3',4,4',5-HpCB)	---	---	---	---	0.000091 (0.00000152)	0.0000834 (0.00000142)	0.000149 (0.00000275)
PCB-171 (2,2',3,3',4,4',6-HpCB)	---	---	---	---	0.0000257 JQ (0.0000014)	0.0000248 J (0.00000128)	0.0000437 J (0.00000252)
PCB-172 (2,2',3,3',4,5,5'-HpCB)	---	---	---	---	0.0000117 JQ (0.00000139)	0.0000133 J (0.00000127)	0.0000214 J (0.0000025)
PCB-173 (2,2',3,3',4,5,6-HpCB)	---	---	---	---	0.0000257 JQ (0.0000014)	0.0000248 J (0.00000128)	0.0000437 J (0.00000252)
PCB-174 (2,2',3,3',4,5,6'-HpCB)	---	---	---	---	0.000105 (0.0000013)	0.0000987 (0.00000119)	0.000164 (0.00000234)
PCB-175 (2,2',3,3',4,5',6-HpCB)	---	---	---	---	0.00000294 JQ (0.00000125)	0.00000296 J (0.00000114)	0.00000454 J (0.00000224)
PCB-177 (2,2',3,3',4,5',6'-HpCB)	---	---	---	---	0.0000547 (0.00000133)	0.0000507 (0.00000122)	0.0000838 (0.00000239)
PCB-176 (2,2',3,3',4,6,6'-HpCB)	---	---	---	---	0.0000129 JQ (0.000000951)	0.0000126 J (0.000000871)	0.0000213 J (0.00000171)
PCB-178 (2,2',3,3',5,5',6-HpCB)	---	---	---	---	0.0000243 J (0.00000135)	0.0000213 J (0.00000124)	0.0000295 J (0.00000243)
PCB-179 (2,2',3,3',5,6,6'-HpCB)	---	---	---	---	0.0000548 (0.000001)	0.0000527 (0.000000918)	0.0000834 (0.0000018)
PCB-180 (2,2',3,4,4',5,5'-HpCB)	---	---	---	---	0.000211 (0.00000106)	0.000197 (0.00000097)	0.0004 (0.00000191)
PCB-181 (2,2',3,4,4',5,6-HpCB)	---	---	---	---	U (0.00000125)	U (0.00000114)	U (0.00000224)
PCB-182 (2,2',3,4,4',5,6'-HpCB)	---	---	---	---	U (0.00000121)	U (0.00000111)	U (0.00000218)
PCB-183 (2,2',3,4,4',5',6-HpCB)	---	---	---	---	0.0000724 (0.00000124)	0.0000672 (0.00000113)	0.00012 (0.00000223)
PCB-185 (2,2',3,4,5,5',6-HpCB)	---	---	---	---	0.0000724 (0.00000124)	0.0000672 (0.00000113)	0.00012 (0.00000223)
PCB-187 (2,2',3,4',5,5',6-HpCB)	---	---	---	---	0.000193 (0.00000116)	0.000183 (0.00000106)	0.000293 (0.00000209)
PCB-188 (2,2',3,4',5,6,6'-HpCB)	---	---	---	---	U (0.000000868)	U (0.000000783)	U (0.00000155)
PCB-189 (2,3,3',4,4',5,5'-HpCB)	---	---	---	---	0.00000212 J (0.000000844)	0.00000215 J (0.000000835)	0.0000021 EMPC J (0.00000155)
PCB-190 (2,3,3',4,4',5,6-HpCB)	---	---	---	---	0.0000135 J (0.000000967)	0.0000151 J (0.000000885)	0.0000226 J (0.00000174)
PCB-191 (2,3,3',4,4',5',6-HpCB)	---	---	---	---	0.00000406 J (0.00000095)	0.00000326 JQ (0.00000087)	0.00000418 J (0.00000171)
PCB-193 (2,3,3',4',5,5',6-HpCB)	---	---	---	---	0.000211 (0.00000106)	0.000197 (0.00000097)	0.0004 (0.00000191)
PCB-128 (2,2',3,3',4,4'-HxCB)	---	---	---	---	0.0000492 (0.00000127)	0.0000474 (0.00000128)	0.0000432 J (0.00000212)
PCB-129 (2,2',3,3',4,5-HxCB)	---	---	---	---	0.000389 B (0.00000131)	0.000374 B (0.00000132)	0.000433 B (0.0000022)
PCB-130 (2,2',3,3',4,5'-HxCB)	---	---	---	---	0.000019 J (0.00000169)	0.0000196 J (0.0000017)	0.000017 J (0.00000284)
PCB-131 (2,2',3,3',4,6-HxCB)	---	---	---	---	0.00000576 JQ (0.00000174)	0.00000475 J (0.00000174)	U (0.0000029)
PCB-132 (2,2',3,3',4,6'-HxCB)	---	---	---	---	0.000155 (0.00000165)	0.000152 (0.00000166)	0.000151 (0.00000276)
PCB-133 (2,2',3,3',5,5'-HxCB)	---	---	---	---	0.00000775 J (0.00000159)	0.00000716 J (0.0000016)	0.00000754 J (0.00000266)
PCB-134 (2,2',3,3',5,6-HxCB)	---	---	---	---	0.0000289 J (0.0000017)	0.0000248 JQ (0.00000171)	0.0000251 J (0.00000284)
PCB-135 (2,2',3,3',5,6'-HxCB)	---	---	---	---	0.000181 (0.00000148)	0.000165 (0.00000148)	0.000194 (0.00000352)
PCB-136 (2,2',3,3',6,6'-HxCB)	---	---	---	---	0.0000832 (0.00000109)	0.0000818 (0.00000109)	0.0000781 J (0.00000259)
PCB-137 (2,2',3,4,4',5-HxCB)	---	---	---	---	0.0000115 J (0.00000146)	0.0000103 JQ (0.00000147)	0.0000078 JQ (0.00000245)
PCB-138 (2,2',3,4,4',5'-HxCB)	---	---	---	---	0.000389 B (0.00000131)	0.000374 B (0.00000132)	0.000433 B (0.0000022)
PCB-139 (2,2',3,4,4',6-HxCB)	---	---	---	---	0.00000628 J (0.00000145)	0.00000536 J (0.00000146)	0.00000239 EMPC J (0.00000243)
PCB-140 (2,2',3,4,4',6'-HxCB)	---	---	---	---	0.00000628 J (0.00000145)	0.00000536 J (0.00000146)	0.00000239 EMPC J (0.00000243)
PCB-141 (2,2',3,4,5,5'-HxCB)	---	---	---	---	0.0000805 (0.00000151)	0.0000731 (0.00000152)	0.0000995 (0.00000253)
PCB-143 (2,2',3,4,5,6'-HxCB)	---	---	---	---	0.0000289 J (0.0000017)	0.0000248 JQ (0.00000171)	0.0000251 J (0.00000284)
PCB-144 (2,2',3,4,5',6-HxCB)	---	---	---	---	0.0000187 J (0.00000138)	0.0000189 J (0.00000138)	0.0000199 J (0.00000327)
PCB-146 (2,2',3,4',5,5'-HxCB)	---	---	---	---	0.0000576 (0.00000138)	0.0000566 (0.00000139)	0.0000642 J (0.00000231)
PCB-147 (2,2',3,4',5,6-HxCB)	---	---	---	---	0.000413 B (0.00000141)	0.00039 B (0.00000142)	0.000434 B (0.00000236)
PCB-148 (2,2',3,4',5,6'-HxCB)	---	---	---	---	U (0.00000146)	U (0.00000145)	U (0.00000346)
PCB-149 (2,2',3,4',5',6-HxCB)	---	---	---	---	0.000413 B (0.00000141)	0.00039 B (0.00000142)	0.000434 B (0.00000236)
PCB-150 (2,2',3,4',6,6'-HxCB)	---	---	---	---	U (0.00000101)	U (0.00000101)	U (0.00000241)
PCB-151 (2,2',3,5,5',6-HxCB)	---	---	---	---	0.000181 (0.00000148)	0.000165 (0.00000148)	0.000194 (0.00000352)
PCB-152 (2,2',3,5,6,6'-HxCB)	---	---	---	---	U (0.00000103)	U (0.00000103)	U (0.00000246)
PCB-153 (2,2',4,4',5,5'-HxCB)	---	---	---	---	0.000327 B (0.00000113)	0.000308 B (0.00000114)	0.000416 B (0.0000019)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-04	MB-MW-04	MB-MW-04
ENVIRON Sample ID	MB-MW-03-20120424	MB-MW-03-20121017	MB-MW-03-20130410	MB-MW-03-20131009	MB-MW-04-20100729	DUP-20100729	MB-MW-04-20101019
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	4/24/2012	10/17/2012	4/10/2013	10/9/2013	7/29/2010	7/29/2010	10/19/2010
Comments						Field Duplicate	
PCB-154 (2,2',4,4',5,6'-HxCB)	---	---	---	---	0.00000576 J (0.00000121)	0.00000703 JQ (0.00000121)	0.00000308 EMPC J (0.00000287)
PCB-155 (2,2',4,4',6,6'-HxCB)	---	---	---	---	U (0.000000987)	U (0.000000986)	U (0.00000234)
PCB-156 (2,3,3',4,4',5-HxCB)	---	---	---	---	0.0000301 J (0.00000135)	0.0000302 J (0.00000138)	0.0000284 J (0.00000222)
PCB-157 (2,3,3',4,4',5'-HxCB)	---	---	---	---	0.0000301 J (0.00000135)	0.0000302 J (0.00000138)	0.0000284 J (0.00000222)
PCB-158 (2,3,3',4,4',6-HxCB)	---	---	---	---	0.0000327 J (0.00000104)	0.0000313 JQ (0.00000104)	0.0000369 J (0.00000173)
PCB-159 (2,3,3',4,5,5'-HxCB)	---	---	---	---	0.00000362 J (0.00000111)	0.00000208 JQ (0.00000112)	0.00000448 EMPC J (0.00000186)
PCB-160 (2,3,3',4,5,6-HxCB)	---	---	---	---	0.000389 B (0.00000131)	0.000374 B (0.00000132)	0.000433 B (0.0000022)
PCB-162 (2,3,3',4',5,5'-HxCB)	---	---	---	---	U (0.0000011)	U (0.0000011)	U (0.00000184)
PCB-163 (2,3,3',4',5,6-HxCB)	---	---	---	---	0.000389 B (0.00000131)	0.000374 B (0.00000132)	0.000433 B (0.0000022)
PCB-164 (2,3,3',4',5',6-HxCB)	---	---	---	---	0.0000271 J (0.00000116)	0.0000266 J (0.00000116)	0.0000269 J (0.00000193)
PCB-166 (2,3,4,4',5,6-HxCB)	---	---	---	---	0.0000492 (0.00000127)	0.0000474 (0.00000128)	0.0000432 J (0.00000212)
PCB-167 (2,3',4,4',5,5'-HxCB)	---	---	---	---	0.0000101 J (0.000000829)	0.0000109 J (0.000000826)	0.00000944 J (0.00000131)
PCB-168 (2,3',4,4',5',6-HxCB)	---	---	---	---	0.000327 B (0.00000113)	0.000308 B (0.00000114)	0.000416 B (0.0000019)
PCB-169 (3,3',4,4',5,5'-HxCB)	---	---	---	---	0.000000745 J (0.000000884)	0.00000336 JQ (0.000000883)	U (0.00000164)
PCB-206 (2,2',3,3',4,4',5,5',6-NoCB)	---	---	---	---	0.000541 (0.00000117)	0.000541 (0.00000112)	0.000775 (0.00000174)
PCB-207 (2,2',3,3',4,4',5,6,6'-NoCB)	---	---	---	---	0.0000459 (0.000000838)	0.0000465 (0.00000077)	0.000058 J (0.00000126)
PCB-208 (2,2',3,3',4,5,5',6,6'-NoCB)	---	---	---	---	0.000206 (0.000000876)	0.000211 (0.000000783)	0.000283 (0.00000132)
PCB-194 (2,2',3,3',4,4',5,5'-OcCB)	---	---	---	---	0.000112 (0.00000107)	0.00011 (0.00000114)	0.000148 (0.00000153)
PCB-195 (2,2',3,3',4,4',5,6-OcCB)	---	---	---	---	0.000016 J (0.00000116)	0.0000161 J (0.00000123)	0.0000239 EMPC J (0.00000166)
PCB-196 (2,2',3,3',4,4',5,6'-OcCB)	---	---	---	---	0.0000459 Q (0.00000124)	0.0000433 Q (0.00000125)	0.00007 J (0.00000246)
PCB-197 (2,2',3,3',4,4',6,6'-OcCB)	---	---	---	---	0.00000149 JQ (0.000000922)	0.00000175 JQ (0.000000932)	0.0000184 J (0.00000183)
PCB-198 (2,2',3,3',4,5,5',6-OcCB)	---	---	---	---	0.000347 (0.00000128)	0.000336 (0.00000129)	0.000463 (0.00000254)
PCB-199 (2,2',3,3',4,5,5',6'-OcCB)	---	---	---	---	0.000347 (0.00000128)	0.000336 (0.00000129)	0.000463 (0.00000254)
PCB-200 (2,2',3,3',4,5,6,6'-OcCB)	---	---	---	---	0.0000178 J (0.000000905)	0.0000182 J (0.000000915)	U (0.0000018)
PCB-201 (2,2',3,3',4,5',6,6'-OcCB)	---	---	---	---	0.0000252 J (0.000000874)	0.0000258 J (0.000000884)	0.0000266 J (0.00000174)
PCB-202 (2,2',3,3',5,5',6,6'-OcCB)	---	---	---	---	0.000112 (0.000000985)	0.000108 (0.000000995)	0.000124 (0.00000195)
PCB-203 (2,2',3,4,4',5,5',6-OcCB)	---	---	---	---	0.000258 (0.00000114)	0.000251 (0.00000116)	0.000323 (0.00000227)
PCB-204 (2,2',3,4,4',5,6,6'-OcCB)	---	---	---	---	U (0.000000958)	U (0.000000969)	0.00000303 EMPC J (0.0000019)
PCB-205 (2,3,3',4,4',5,5',6-OcCB)	---	---	---	---	0.00000194 JQ (0.000000901)	0.0000019 JQ (0.000000957)	0.00000388 J (0.00000128)
PCB-24/27	---	---	---	---	---	---	---
PCB-42/59	---	---	---	---	---	---	---
PCB-52/69	---	---	---	---	---	---	---
PCB-61/70	---	---	---	---	---	---	---
PCB-90/101	---	---	---	---	---	---	---
PCB-107/109	---	---	---	---	---	---	---
PCB-132/161	---	---	---	---	---	---	---
PCB-133/142	---	---	---	---	---	---	---
PCB-138/163/164	---	---	---	---	---	---	---
PCB-196/203	---	---	---	---	---	---	---
PCB-082 (2,2',3,3',4-PeCB)	---	---	---	---	0.0000496 (0.00000156)	0.0000477 (0.00000174)	0.0000349 EMPC J (0.00000356)
PCB-083 (2,2',3,3',5-PeCB)	---	---	---	---	0.00026 (0.00000131)	0.000265 (0.00000146)	0.000218 (0.00000299)
PCB-084 (2,2',3,3',6-PeCB)	---	---	---	---	0.000195 (0.00000149)	0.000195 (0.00000166)	0.000165 (0.0000034)
PCB-085 (2,2',3,4,4'-PeCB)	---	---	---	---	0.0000537 (0.00000108)	0.0000559 (0.0000012)	0.0000498 J (0.00000247)
PCB-086 (2,2',3,4,5-PeCB)	---	---	---	---	0.000272 B (0.0000011)	0.000278 B (0.00000123)	0.000237 (0.00000252)
PCB-087 (2,2',3,4,5'-PeCB)	---	---	---	---	0.000272 B (0.0000011)	0.000278 B (0.00000123)	0.000237 (0.00000252)
PCB-088 (2,2',3,4,6-PeCB)	---	---	---	---	0.0000936 (0.00000133)	0.0000972 (0.00000148)	0.0000762 J (0.00000303)
PCB-089 (2,2',3,4,6'-PeCB)	---	---	---	---	0.00000524 J (0.00000144)	0.00000448 JQ (0.00000161)	0.00000576 EMPC J (0.00000329)
PCB-090 (2,2',3,4',5-PeCB)	---	---	---	---	0.000537 B (0.00000112)	0.000539 B (0.00000125)	0.000484 B (0.00000257)
PCB-097 (2,2',3,4',5'-PeCB)	---	---	---	---	0.000272 B (0.0000011)	0.000278 B (0.00000123)	0.000237 (0.00000252)
PCB-091 (2,2',3,4',6-PeCB)	---	---	---	---	0.0000936 (0.00000133)	0.0000972 (0.00000148)	0.0000762 J (0.00000303)
PCB-098 (2,2',3,4',6'-PeCB)	---	---	---	---	0.0000299 J (0.00000124)	0.0000294 J (0.00000138)	0.0000201 J (0.00000284)
PCB-092 (2,2',3,5,5'-PeCB)	---	---	---	---	0.000114 (0.00000128)	0.000112 (0.00000142)	0.0000867 (0.00000291)
PCB-093 (2,2',3,5,6-PeCB)	---	---	---	---	0.000019 JQ (0.00000128)	0.0000208 J (0.00000143)	0.00000544 J (0.00000293)
PCB-094 (2,2',3,5,6'-PeCB)	---	---	---	---	0.0000129 J (0.00000144)	0.0000121 J (0.00000161)	U (0.00000329)
PCB-095 (2,2',3,5',6-PeCB)	---	---	---	---	0.000645 (0.00000136)	0.000646 (0.00000151)	0.000608 (0.0000031)
PCB-096 (2,2',3,6,6'-PeCB)	---	---	---	---	0.00000935 JQ (0.00000108)	0.0000101 J (0.0000012)	0.00000881 J (0.00000246)
PCB-099 (2,2',4,4',5-PeCB)	---	---	---	---	0.00026 (0.00000131)	0.000265 (0.00000146)	0.000218 (0.00000299)
PCB-100 (2,2',4,4',6-PeCB)	---	---	---	---	0.000019 JQ (0.00000128)	0.0000208 J (0.00000143)	0.00000544 J (0.00000293)
PCB-101 (2,2',4,5,5'-PeCB)	---	---	---	---	0.000537 B (0.00000112)	0.000539 B (0.00000125)	0.000484 B (0.00000257)
PCB-102 (2,2',4,5,6'-PeCB)	---	---	---	---	0.0000299 J (0.00000124)	0.0000294 J (0.00000138)	0.0000201 J (0.00000284)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-04	MB-MW-04	MB-MW-04
ENVIRON Sample ID	MB-MW-03-20120424	MB-MW-03-20121017	MB-MW-03-20130410	MB-MW-03-20131009	MB-MW-04-20100729	DUP-20100729	MB-MW-04-20101019
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	4/24/2012	10/17/2012	4/10/2013	10/9/2013	7/29/2010	7/29/2010	10/19/2010
Comments						Field Duplicate	
PCB-103 (2,2',4,5',6-PeCB)	---	---	---	---	0.0000111 J (0.00000126)	0.00000903 JQ (0.00000141)	0.00000671 J (0.00000289)
PCB-104 (2,2',4,6,6'-PeCB)	---	---	---	---	U (0.000000961)	U (0.00000107)	U (0.00000219)
PCB-105 (2,3,3',4,4'-PeCB)	---	---	---	---	0.0000781 (0.000000863)	0.0000799 (0.000000948)	0.0000633 J (0.00000155)
PCB-108 (2,3,3',4,5'-PeCB)	---	---	---	---	0.00000875 J (0.000000928)	0.00000841 J (0.00000102)	0.0000048 EMPC J (0.0000017)
PCB-109 (2,3,3',4,6-PeCB)	---	---	---	---	0.000272 B (0.0000011)	0.000278 B (0.00000123)	0.000237 (0.00000252)
PCB-107 (2,3,3',4',5-PeCB)	---	---	---	---	0.0000236 J (0.000000883)	0.0000237 J (0.000000971)	0.0000149 EMPC J (0.00000162)
PCB-110 (2,3,3',4',6-PeCB)	---	---	---	---	0.000535 B (0.000000953)	0.000524 B (0.00000106)	0.000478 B (0.00000218)
PCB-111 (2,3,3',5,5'-PeCB)	---	---	---	---	U (0.000000903)	U (0.00000101)	U (0.00000206)
PCB-113 (2,3,3',5',6-PeCB)	---	---	---	---	0.000537 B (0.00000112)	0.000539 B (0.00000125)	0.000484 B (0.00000257)
PCB-114 (2,3,4,4',5-PeCB)	---	---	---	---	0.0000037 JQ (0.000000828)	0.00000432 J (0.000000929)	0.00000391 EMPC J (0.00000151)
PCB-115 (2,3,4,4',6-PeCB)	---	---	---	---	0.000535 B (0.000000953)	0.000524 B (0.00000106)	0.000478 B (0.00000218)
PCB-116 (2,3,4,5,6-PeCB)	---	---	---	---	0.0000537 (0.00000108)	0.0000559 (0.0000012)	0.0000498 J (0.00000247)
PCB-117 (2,3,4',5,6-PeCB)	---	---	---	---	0.0000537 (0.00000108)	0.0000559 (0.0000012)	0.0000498 J (0.00000247)
PCB-118 (2,3',4,4',5-PeCB)	---	---	---	---	0.000282 B (0.000000865)	0.000282 B (0.000000961)	0.000223 B (0.00000151)
PCB-119 (2,3',4,4',6-PeCB)	---	---	---	---	0.000272 B (0.0000011)	0.000278 B (0.00000123)	0.000237 (0.00000252)
PCB-120 (2,3',4,5,5'-PeCB)	---	---	---	---	U (0.000000929)	0.00000167 JQ (0.00000103)	U (0.00000212)
PCB-121 (2,3',4,5',6-PeCB)	---	---	---	---	U (0.000000936)	U (0.00000104)	U (0.00000214)
PCB-122 (2,3,3',4',5'-PeCB)	---	---	---	---	0.00000336 J (0.000000991)	0.00000332 J (0.00000109)	U (0.00000181)
PCB-123 (2,3',4,4',5'-PeCB)	---	---	---	---	0.00000519 J (0.000000917)	0.00000467 J (0.000000994)	0.00000197 EMPC J (0.00000162)
PCB-124 (2,3',4',5,5'-PeCB)	---	---	---	---	0.00000875 J (0.000000928)	0.00000841 J (0.00000102)	0.0000048 EMPC J (0.0000017)
PCB-125 (2,3',4',5',6-PeCB)	---	---	---	---	0.000272 B (0.0000011)	0.000278 B (0.00000123)	0.000237 (0.00000252)
PCB-126 (3,3',4,4',5-PeCB)	---	---	---	---	0.00000281 JQ (0.000000893)	0.00000307 J (0.000000968)	U (0.00000183)
PCB-127 (3,3',4,5,5'-PeCB)	---	---	---	---	U (0.000000899)	U (0.000000989)	U (0.00000165)
PCB-040 (2,2',3,3'-TeCB)	---	---	---	---	0.000645 (0.00000151)	0.000627 (0.00000151)	0.000621 (0.00000297)
PCB-041 (2,2',3,4-TeCB)	---	---	---	---	0.000645 (0.00000151)	0.000627 (0.00000151)	0.000621 (0.00000297)
PCB-042 (2,2',3,4'-TeCB)	---	---	---	---	0.00029 (0.00000154)	0.000283 (0.00000153)	0.000283 (0.00000302)
PCB-043 (2,2',3,5-TeCB)	---	---	---	---	0.0000564 (0.00000141)	0.0000606 (0.00000141)	0.0000584 J (0.00000277)
PCB-044 (2,2',3,5'-TeCB)	---	---	---	---	0.00145 B (0.00000135)	0.00143 B (0.00000135)	0.00137 B (0.00000266)
PCB-045 (2,2',3,6-TeCB)	---	---	---	---	0.000731 B (0.00000157)	0.000713 B (0.00000156)	0.000642 B (0.00000308)
PCB-046 (2,2',3,6'-TeCB)	---	---	---	---	0.000351 (0.00000185)	0.000338 (0.00000184)	0.00031 (0.00000364)
PCB-047 (2,2',4,4'-TeCB)	---	---	---	---	0.00145 B (0.00000135)	0.00143 B (0.00000135)	0.00137 B (0.00000266)
PCB-048 (2,2',4,5-TeCB)	---	---	---	---	0.000191 (0.0000015)	0.000187 (0.00000149)	0.000194 (0.00000295)
PCB-049 (2,2',4,5'-TeCB)	---	---	---	---	0.00108 (0.00000125)	0.00106 (0.00000124)	0.000973 B (0.00000245)
PCB-050 (2,2',4,6-TeCB)	---	---	---	---	0.00117 (0.00000146)	0.00114 (0.00000145)	0.00105 (0.00000286)
PCB-051 (2,2',4,6'-TeCB)	---	---	---	---	0.000731 B (0.00000157)	0.000713 B (0.00000156)	0.000642 B (0.00000308)
PCB-052 (2,2',5,5'-TeCB)	---	---	---	---	0.00199 B (0.00000146)	0.00193 B (0.00000145)	0.00187 B (0.00000286)
PCB-053 (2,2',5,6'-TeCB)	---	---	---	---	0.00117 (0.00000146)	0.00114 (0.00000145)	0.00105 (0.00000286)
PCB-054 (2,2',6,6'-TeCB)	---	---	---	---	0.000159 (0.00000183)	0.000156 (0.00000177)	0.000129 (0.00000338)
PCB-055 (2,3,3',4-TeCB)	---	---	---	---	U (0.00000117)	0.00000794 JQ (0.00000117)	0.00000808 EMPC J (0.0000023)
PCB-056 (2,3,3',4'-TeCB)	---	---	---	---	0.000186 (0.0000011)	0.000178 (0.0000011)	0.000199 B (0.00000216)
PCB-057 (2,3,3',5-TeCB)	---	---	---	---	0.00000525 J (0.00000112)	0.00000457 JQ (0.00000111)	0.00000321 EMPC J (0.00000219)
PCB-058 (2,3,3',5'-TeCB)	---	---	---	---	U (0.00000111)	U (0.00000111)	0.00000116 EMPC J (0.00000218)
PCB-059 (2,3,3',6-TeCB)	---	---	---	---	0.000109 (0.00000108)	0.000106 (0.00000107)	0.000108 B (0.00000211)
PCB-060 (2,3,4,4'-TeCB)	---	---	---	---	0.0000788 (0.00000114)	0.0000692 (0.00000113)	0.0000929 (0.00000223)
PCB-061 (2,3,4,5-TeCB)	---	---	---	---	0.00076 B (0.00000108)	0.000749 B (0.00000107)	0.000791 B (0.00000211)
PCB-062 (2,3,4,6-TeCB)	---	---	---	---	0.000109 (0.00000108)	0.000106 (0.00000107)	0.000108 B (0.00000211)
PCB-063 (2,3,4',5-TeCB)	---	---	---	---	0.0000237 J (0.00000104)	0.0000244 J (0.00000103)	0.0000188 J (0.00000203)
PCB-064 (2,3,4',6-TeCB)	---	---	---	---	0.000318 B (0.00000102)	0.000308 B (0.00000101)	0.000326 (0.000002)
PCB-065 (2,3,5,6-TeCB)	---	---	---	---	0.00145 B (0.00000135)	0.00143 B (0.00000135)	0.00137 B (0.00000266)
PCB-066 (2,3',4,4'-TeCB)	---	---	---	---	0.000395 (0.00000107)	0.00039 (0.00000106)	0.000407 B (0.0000021)
PCB-067 (2,3',4,5-TeCB)	---	---	---	---	0.0000182 J (0.000001)	0.000017 J (0.000000998)	0.0000154 J (0.00000197)
PCB-068 (2,3',4,5'-TeCB)	---	---	---	---	0.0000126 J (0.00000101)	0.0000135 J (0.00000101)	UB (0.00000198)
PCB-069 (2,3',4,6-TeCB)	---	---	---	---	0.00108 (0.00000125)	0.00106 (0.00000124)	0.000973 B (0.00000245)
PCB-070 (2,3',4',5-TeCB)	---	---	---	---	0.00076 B (0.00000108)	0.000749 B (0.00000107)	0.000791 B (0.00000211)
PCB-076 (2,3',4',5'-TeCB)	---	---	---	---	0.00076 B (0.00000108)	0.000749 B (0.00000107)	0.000791 B (0.00000211)
PCB-071 (2,3',4',6-TeCB)	---	---	---	---	0.000645 (0.00000151)	0.000627 (0.00000151)	0.000621 (0.00000297)
PCB-072 (2,3',5,5'-TeCB)	---	---	---	---	0.000012 J (0.00000109)	0.0000139 J (0.00000108)	0.00000985 J (0.00000213)
PCB-073 (2,3',5',6-TeCB)	---	---	---	---	0.0000564 (0.00000141)	0.0000606 (0.00000141)	0.0000584 J (0.00000277)
PCB-074 (2,4,4',5-TeCB)	---	---	---	---	0.00076 B (0.00000108)	0.000749 B (0.00000107)	0.000791 B (0.00000211)
PCB-075 (2,4,4',6-TeCB)	---	---	---	---	0.000109 (0.00000108)	0.000106 (0.00000107)	0.000108 B (0.00000211)
PCB-077 (3,3',4,4'-TeCB)	---	---	---	---	0.0000226 J (0.00000105)	0.0000224 J (0.00000103)	0.0000223 J (0.00000213)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-03	MB-MW-04	MB-MW-04	MB-MW-04
ENVIRON Sample ID	MB-MW-03-20120424	MB-MW-03-20121017	MB-MW-03-20130410	MB-MW-03-20131009	MB-MW-04-20100729	DUP-20100729	MB-MW-04-20101019
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	4/24/2012	10/17/2012	4/10/2013	10/9/2013	7/29/2010	7/29/2010	10/19/2010
Comments						Field Duplicate	
PCB-078 (3,3',4,5-TeCB)	---	---	---	---	U (0.00000115)	U (0.00000115)	U (0.00000226)
PCB-079 (3,3',4,5'-TeCB)	---	---	---	---	0.0000048 JQ (0.00000101)	0.00000473 J (0.00000101)	0.00000481 EMPC J (0.00000199)
PCB-081 (3,4,4',5-TeCB)	---	---	---	---	U (0.00000104)	U (0.00000105)	U (0.00000198)
PCB-016 (2,2',3-TrCB)	---	---	---	---	0.00356 (0.00000274)	0.00341 (0.00000263)	0.00323 (0.00000609)
PCB-017 (2,2',4-TrCB)	---	---	---	---	0.00427 (0.00000229)	0.00415 (0.00000219)	0.00409 (0.00000508)
PCB-018 (2,2',5-TrCB)	---	---	---	---	0.00872 (0.00000203)	0.00827 (0.00000194)	0.00854 B (0.0000045)
PCB-019 (2,2',6-TrCB)	---	---	---	---	0.00416 (0.0000028)	0.00395 (0.00000268)	0.00369 (0.00000623)
PCB-020 (2,3,3'-TrCB)	---	---	---	---	0.00277 B (0.00000129)	0.00278 B (0.00000127)	0.00269 B (0.00000218)
PCB-021 (2,3,4-TrCB)	---	---	---	---	0.00138 B (0.00000129)	0.00135 B (0.00000127)	0.00128 B (0.00000219)
PCB-022 (2,3,4'-TrCB)	---	---	---	---	0.000902 (0.00000131)	0.000874 (0.00000129)	0.000806 B (0.00000223)
PCB-023 (2,3,5-TrCB)	---	---	---	---	0.00000262 J (0.00000134)	0.00000362 J (0.00000132)	U (0.00000227)
PCB-024 (2,3,6-TrCB)	---	---	---	---	0.000124 J (0.00000192)	UJ (0.00000184)	0.000139 (0.00000426)
PCB-025 (2,3',4-TrCB)	---	---	---	---	0.00053 (0.00000119)	0.000513 (0.00000118)	0.000466 (0.00000202)
PCB-026 (2,3',5-TrCB)	---	---	---	---	0.00101 (0.00000127)	0.000981 (0.00000125)	0.000926 B (0.00000215)
PCB-027 (2,3',6-TrCB)	---	---	---	---	0.00413 (0.00000165)	0.00411 (0.00000158)	0.00387 (0.00000367)
PCB-028 (2,4,4'-TrCB)	---	---	---	---	0.00277 B (0.00000129)	0.00278 B (0.00000127)	0.00269 B (0.00000218)
PCB-030 (2,4,6-TrCB)	---	---	---	---	0.00872 (0.00000203)	0.00827 (0.00000194)	0.00854 B (0.0000045)
PCB-029 (2,4,5-TrCB)	---	---	---	---	0.00101 (0.00000127)	0.000981 (0.00000125)	0.000926 B (0.00000215)
PCB-031 (2,4',5-TrCB)	---	---	---	---	0.00281 B (0.00000126)	0.00274 B (0.00000124)	0.00268 B (0.00000213)
PCB-032 (2,4',6-TrCB)	---	---	---	---	0.0025 (0.00000162)	0.00239 (0.00000155)	0.00241 (0.0000036)
PCB-033 (2,3',4'-TrCB)	---	---	---	---	0.00138 B (0.00000129)	0.00135 B (0.00000127)	0.00128 B (0.00000219)
PCB-034 (2,3',5'-TrCB)	---	---	---	---	0.0000214 J (0.00000132)	0.0000217 J (0.0000013)	0.0000158 J (0.00000223)
PCB-035 (3,3',4-TrCB)	---	---	---	---	0.0000151 J (0.00000135)	0.0000149 J (0.00000133)	0.0000119 EMPC J (0.0000023)
PCB-036 (3,3',5-TrCB)	---	---	---	---	U (0.00000131)	U (0.00000129)	U (0.00000222)
PCB-037 (3,4,4'-TrCB)	---	---	---	---	0.00033 (0.00000134)	0.000316 (0.00000132)	0.000287 B (0.00000228)
PCB-038 (3,4,5-TrCB)	---	---	---	---	0.00000146 JQ (0.00000138)	U (0.00000136)	U (0.00000234)
PCB-039 (3,4',5-TrCB)	---	---	---	---	0.00000486 J (0.00000123)	0.00000598 JQ (0.00000121)	U (0.00000208)
PCB Aroclors							
PCBs (total)	U (0.01)	0.027 (0.01)	0.033 (0.011)	U (0.0095)	0.0211 (0.00299)	0.0231 (0.00299)	U (0.00299)
Aroclor-1016	U (0.01)	U (0.01)	U (0.011)	U (0.0095)	0.0211 (0.00257)	0.0231 (0.00257)	U (0.00257)
Aroclor-1242	U (0.01)	U (0.01)	U (0.011)	U (0.0095)	U (0.00189)	U (0.00189)	U (0.00189)
Aroclor-1248	U (0.01)	0.027 (0.01)	U (0.011)	U (0.0095)	U (0.00232)	U (0.00232)	U (0.00232)
Aroclor-1260	U (0.01)	U (0.01)	U (0.011)	U (0.0095)	U (0.00138)	U (0.00138)	U (0.00138)
Aroclor-1268	U (0.01)	U (0.01)	0.033 (0.011)	U (0.0095)	U (0.00277)	U (0.00277)	U (0.00277)
CDDF							
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	---	---	---	---	U (0.00000203)	U (0.00000329)	---
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	---	---	---	---	U (0.00000162)	U (0.00000251)	---
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	---	---	---	---	U (0.00000206)	U (0.00000363)	---
Octachlorodibenzo-p-dioxin	---	---	---	---	0.0000211 J (0.00000227)	0.00000858 J (0.00000296)	---
2,3,7,8-Tetrachlorodibenzo-p-dioxin	---	---	---	---	U (0.00000395)	U (0.00000626)	---
1,2,3,7,8-Pentachlorodibenzofuran	---	---	---	---	U (0.00000149)	U (0.00000255)	---
1,2,3,4,7,8-Hexachlorodibenzofuran	---	---	---	---	U (0.000000886)	U (0.00000154)	---
1,2,3,4,6,7,8-Heptachlorodibenzofuran	---	---	---	---	U (0.00000118)	U (0.00000184)	---
Octachlorodibenzofuran	---	---	---	---	U (0.00000221)	U (0.00000348)	---

Notes:
1 All concentrations are presented in ug/L (ppb).
2 Only compounds with at least one detection are shown.

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04
ENVIRON Sample ID	DUP-20101019	MB-MW-04-20110113	DUP-20110113	MB-MW-04-20110413	DUP-20110413	MB-MW-04-20110727	DUP-072711-20110727
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	10/19/2010	1/13/2011	1/13/2011	4/13/2011	4/13/2011	7/27/2011	7/27/2011
Comments	Field Duplicate		Field Duplicate		Field Duplicate		Field Duplicate
SVOC							
Acenaphthene	---	1.67 J (0.164)	2.29 J (0.167)	---	---	3 (2.1)	2.9 (2.1)
Acenaphthylene	---	U (0.173)	U (0.176)	---	---	U (0.16)	U (0.16)
Acetophenone	---	U (0.912)	U (0.928)	---	---	U (0.85)	U (0.85)
Anthracene	---	U (0.176)	U (0.179)	---	---	U (0.16)	U (0.16)
Benzaldehyde	---	U (1.71)	U (1.74)	---	---	U (1.6)	U (1.6)
Benzo(a)anthracene	---	U (0.168)	U (0.171)	---	---	U (0.16)	U (0.16)
Benzo(a)pyrene	---	U (0.153)	U (0.155)	---	---	U (0.14)	U (0.14)
Benzo(b)fluoranthene	---	U (0.179)	U (0.182)	---	---	U (0.17)	U (0.17)
Benzo(g,h,i)perylene	---	U (0.172)	U (0.175)	---	---	U (0.16)	U (0.16)
Benzo(k)fluoranthene	---	U (0.624)	U (0.635)	---	---	U (0.58)	U (0.58)
Biphenyl	---	U (0.473)	U (0.481)	---	---	U (0.44)	U (0.44)
bis(2-Chloroethyl) ether	---	U (0.286)	U (0.291)	---	---	U (0.27)	U (0.27)
bis(2-Ethylhexyl)phthalate	---	U (14.3)	U (14.5)	---	---	U (13)	U (13)
Butylbenzylphthalate	---	U (1.62)	U (1.65)	---	---	U (1.5)	U (1.5)
Caprolactam	---	U (13.6)	U (13.8)	---	---	U (13)	U (13)
Carbazole	---	U (0.18)	U (0.183)	---	---	U (0.17)	U (0.17)
4-Chloroaniline	---	U (1.01)	U (1.03)	---	---	U (0.94)	U (0.94)
2-Chlorophenol	---	U (1.88)	U (1.92)	---	---	U (1.8)	U (1.8)
4-Chlorophenyl-phenyl ether	---	U (0.573)	U (0.583)	---	---	U (0.54)	U (0.54)
Chrysene	---	U (0.16)	U (0.162)	---	---	U (0.15)	U (0.15)
Dibenz(a,h)anthracene	---	U (0.177)	U (0.18)	---	---	U (0.16)	U (0.16)
Dibenzofuran	---	U (0.703)	U (0.716)	---	---	U (0.66)	U (0.66)
2,4-Dichlorophenol	---	U (0.381)	U (0.387)	---	---	U (0.36)	U (0.36)
Diethylphthalate	---	U (1.66)	U (1.69)	---	---	U (1.6)	U (1.6)
2,4-Dimethylphenol	---	U (0.971)	U (0.988)	---	---	U (0.91)	U (0.91)
Dimethylphthalate	---	U (0.872)	U (0.887)	---	---	U (0.81)	U (0.81)
Di-n-butylphthalate	---	U (1.42)	U (1.45)	---	---	U (1.3)	U (1.3)
Di-n-octylphthalate	---	U (2.36)	U (2.4)	---	---	U (2.2)	U (2.2)
Fluoranthene	---	U (0.185)	U (0.188)	---	---	U (0.17)	U (0.17)
Fluorene	---	1.3 J (0.246)	1.34 J (0.251)	---	---	2.3 (2.1)	1.9 J (2.1)
Indeno(1,2,3-cd)pyrene	---	U (0.227)	U (0.231)	---	---	U (0.21)	U (0.21)
Isophorone	---	U (0.734)	U (0.747)	---	---	U (0.69)	U (0.69)
2-Methylnaphthalene	---	U (0.139)	U (0.142)	---	---	U (0.13)	U (0.13)
2-Methylphenol	---	U (0.983)	U (1)	---	---	U (0.92)	U (0.92)
3&4-Methylphenol	---	---	---	---	---	---	---
4-Methylphenol	---	U (1.03)	U (1.05)	---	---	U (0.96)	U (0.96)
Naphthalene	---	U (0.16)	U (0.162)	---	---	U (0.15)	U (0.15)
N-Nitrosodiphenylamine	---	U (0.972)	U (0.989)	---	---	U (0.91)	U (0.91)
Pentachlorophenol	---	U (0.756)	U (0.769)	---	---	U (0.71)	U (0.71)
Phenanthrene	---	U (0.487)	U (0.495)	---	---	U (0.45)	U (0.45)
Phenol	---	U (0.662)	U (0.674)	---	---	U (0.62)	U (0.62)
Pyrene	---	U (0.179)	U (0.182)	---	---	U (0.17)	U (0.17)
PCB Congeners							
13C12-PCB 114	---	---	---	---	---	---	---
PCB-001 (2-CB)	0.015 B (0.00000183)	0.0174 B (0.0000011)	0.0159 B (0.00000148)	0.0222 (0.00000292)	0.0221 (0.00000215)	0.019 B (0.0000022)	---
PCB-002 (3-CB)	0.000264 (0.00000195)	0.000492 (0.00000119)	0.000431 (0.0000016)	0.000478 (0.00000314)	0.000487 (0.00000236)	0.00048 (0.0000025)	---
PCB-003 (4-CB)	0.00169 B (0.00000207)	0.00249 (0.00000129)	0.00224 (0.00000173)	0.00262 B (0.00000337)	0.00265 B (0.00000259)	0.0026 (0.0000029)	---

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04
ENVIRON Sample ID	DUP-20101019	MB-MW-04-20110113	DUP-20110113	MB-MW-04-20110413	DUP-20110413	MB-MW-04-20110727	DUP-072711-20110727
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	10/19/2010	1/13/2011	1/13/2011	4/13/2011	4/13/2011	7/27/2011	7/27/2011
Comments	Field Duplicate		Field Duplicate		Field Duplicate		Field Duplicate
PCB-209 (DeCB)	0.000196 (0.00000445)	0.000294 (0.00000103)	0.000258 (0.00000182)	0.000247 J (0.00000934)	0.000189 J (0.00000653)	0.000087 J (0.0000096)	---
PCB-004 (2,2'-DiCB)	0.0444 B (0.000013)	0.0393 (0.00000422)	0.0356 (0.00000383)	0.0509 B (0.0000237)	0.0477 B (0.0000184)	0.045 (0.000015)	---
PCB-005 (2,3-DiCB)	0.00013 EMPC (0.0000086)	0.00011 EMPC (0.0000029)	0.000101 (0.0000029)	0.000158 EMPC J (0.000017)	0.000181 EMPC J (0.0000132)	0.00018 J (0.000012)	---
PCB-006 (2,3'-DiCB)	0.00531 B (0.00000808)	0.0055 (0.00000273)	0.00508 (0.00000273)	0.0061 B (0.000016)	0.00588 B (0.0000124)	0.0065 (0.000011)	---
PCB-007 (2,4-DiCB)	0.000286 B (0.00000831)	0.000301 B (0.0000028)	0.000259 B (0.0000028)	0.000294 EMPC J (0.0000164)	0.000293 EMPC J (0.0000127)	0.00032 EMPC (0.000012)	---
PCB-008 (2,4'-DiCB)	0.0127 B (0.00000791)	0.013 B (0.00000267)	0.0115 B (0.00000267)	0.0142 B (0.0000156)	0.0133 B (0.0000121)	0.015 B (0.000011)	---
PCB-009 (2,5-DiCB)	0.000576 B (0.00000835)	0.000575 (0.00000282)	0.000501 (0.00000282)	0.000624 B (0.0000165)	0.000569 B (0.0000128)	0.00064 (0.000012)	---
PCB-010 (2,6-DiCB)	0.000904 (0.00000897)	0.000876 (0.00000303)	0.000921 (0.00000303)	0.000965 EMPC (0.0000177)	0.000924 (0.0000138)	0.0012 (0.000013)	---
PCB-011 (3,3'-DiCB)	0.000194 B (0.00000795)	0.000177 B (0.00000268)	0.000162 B (0.00000268)	UB (0.0000157)	UB (0.0000122)	UB (0.000011)	---
PCB-012 (3,4-DiCB)	0.000444 (0.00000815)	0.000451 (0.00000275)	0.000389 (0.00000275)	0.000495 EMPC J (0.0000161)	0.0005 BJ (0.0000125)	0.00052 (0.000011)	---
PCB-013 (3,4'-DiCB)	0.000444 (0.00000815)	0.000451 (0.00000275)	0.000389 (0.00000275)	0.000495 EMPC J (0.0000161)	0.0005 BJ (0.0000125)	0.00052 (0.000011)	---
PCB-014 (3,5-DiCB)	U (0.00000703)	U (0.00000237)	U (0.00000237)	U (0.0000139)	U (0.0000108)	U (0.0000098)	---
PCB-015 (4,4'-DiCB)	0.00227 B (0.00000752)	0.0024 B (0.0000026)	0.00219 B (0.00000278)	0.00276 B (0.0000157)	0.00269 B (0.0000122)	0.0029 B (0.000012)	---
PCB-170 (2,2',3,3',4,4',5-HpCB)	0.000188 (0.0000049)	0.000189 (0.00000154)	0.000184 (0.00000211)	UB (0.0000123)	UB (0.00000984)	0.000055 EMPC J (0.0000084)	---
PCB-171 (2,2',3,3',4,4',6-HpCB)	0.0000577 J (0.00000446)	0.0000548 (0.00000139)	0.0000567 (0.00000183)	UB (0.0000113)	UB (0.00000906)	0.000022 EMPC J (0.0000082)	---
PCB-172 (2,2',3,3',4,5,5'-HpCB)	0.0000285 J (0.00000442)	0.0000295 J (0.00000138)	0.0000327 J (0.00000181)	UB (0.0000111)	UB (0.00000897)	U (0.0000081)	---
PCB-173 (2,2',3,3',4,5,6-HpCB)	0.0000577 J (0.00000446)	0.0000548 (0.00000139)	0.0000567 (0.00000183)	UB (0.0000113)	UB (0.00000906)	0.000022 EMPC J (0.0000082)	---
PCB-174 (2,2',3,3',4,5,6'-HpCB)	0.00019 (0.00000413)	0.000212 (0.00000129)	0.000192 (0.0000017)	UB (0.0000104)	UB (0.00000839)	0.000074 BJ (0.0000076)	---
PCB-175 (2,2',3,3',4,5',6-HpCB)	U (0.00000397)	0.00000578 EMPC J (0.00000124)	0.00000864 J (0.00000163)	U (0.00001)	U (0.00000806)	U (0.0000073)	---
PCB-177 (2,2',3,3',4,5',6'-HpCB)	0.00011 (0.00000424)	0.000115 (0.00000132)	0.000101 (0.00000174)	UB (0.0000107)	UB (0.0000086)	0.00004 BJ (0.0000078)	---
PCB-176 (2,2',3,3',4,6,6'-HpCB)	0.0000225 J (0.00000302)	0.0000258 J (0.000000945)	0.0000282 J (0.00000124)	UB (0.00000763)	UB (0.00000614)	0.0000098 EMPC J (0.0000056)	---
PCB-178 (2,2',3,3',5,5',6-HpCB)	0.0000447 EMPC J (0.00000429)	0.0000453 (0.00000134)	0.0000448 (0.00000176)	UB (0.0000108)	UB (0.00000871)	U (0.0000079)	---
PCB-179 (2,2',3,3',5,6,6'-HpCB)	0.0000936 (0.00000319)	0.000101 (0.000000997)	0.0001 (0.00000131)	UB (0.00000804)	UB (0.00000647)	0.000032 EMPC J (0.0000059)	---
PCB-180 (2,2',3,4,4',5,5'-HpCB)	0.000421 (0.00000337)	0.000475 (0.00000105)	0.000406 (0.00000138)	UB (0.0000085)	UB (0.00000684)	0.00013 EMPC J (0.0000062)	---
PCB-181 (2,2',3,4,4',5,6-HpCB)	U (0.00000397)	U (0.00000124)	U (0.00000163)	U (0.00001)	U (0.00000805)	U (0.0000073)	---
PCB-182 (2,2',3,4,4',5,6'-HpCB)	U (0.00000386)	0.0000025 J (0.00000121)	U (0.00000158)	U (0.00000973)	U (0.00000783)	U (0.0000071)	---
PCB-183 (2,2',3,4,4',5',6-HpCB)	0.000142 (0.00000394)	0.000148 (0.00000123)	0.000142 (0.00000162)	UB (0.00000994)	UB (0.000008)	0.000061 J (0.0000072)	---
PCB-185 (2,2',3,4,5,5',6-HpCB)	0.000142 (0.00000394)	0.000148 (0.00000123)	0.000142 (0.00000162)	0.000189 J (0.00000994)	0.000152 J (0.000008)	0.000061 J (0.0000072)	---
PCB-187 (2,2',3,4',5,5',6-HpCB)	0.000325 (0.00000369)	0.000372 (0.00000115)	0.000314 (0.00000151)	UB (0.00000931)	UB (0.00000749)	0.00011 EMPC J (0.0000068)	---
PCB-188 (2,2',3,4',5,6,6'-HpCB)	U (0.00000274)	U (0.000000852)	U (0.00000109)	U (0.00000692)	U (0.00000559)	U (0.0000052)	---
PCB-189 (2,3,3',4,4',5,5'-HpCB)	0.00000391 J (0.00000257)	0.00000388 J (0.00000105)	0.00000682 EMPC J (0.00000189)	U (0.00000581)	U (0.00000461)	U (0.0000058)	---
PCB-190 (2,3,3',4,4',5,6-HpCB)	0.000055 EMPC J (0.00000307)	0.0000496 (0.000000961)	0.0000446 (0.00000126)	UB (0.00000776)	UB (0.00000624)	0.000012 EMPC J (0.0000056)	---
PCB-191 (2,3,3',4,4',5',6-HpCB)	0.00000741 EMPC J (0.00000302)	0.00000893 J (0.000000945)	0.0000109 J (0.00000124)	U (0.00000762)	U (0.00000613)	U (0.0000055)	---
PCB-193 (2,3,3',4',5,5',6-HpCB)	0.000421 (0.00000337)	0.000475 (0.00000105)	0.000406 (0.00000138)	UB (0.0000085)	UB (0.00000684)	0.00013 BJ (0.0000062)	---
PCB-128 (2,2',3,3',4,4'-HxCB)	0.0000529 J (0.00000395)	0.00006 (0.0000014)	0.0000621 (0.00000214)	0.0000786 J (0.00000883)	0.0000647 JQ (0.00000715)	0.00004 J (0.0000079)	---
PCB-129 (2,2',3,3',4,5-HxCB)	0.000451 B (0.00000408)	0.000531 B (0.00000144)	0.000477 B (0.00000221)	0.000804 B (0.00000913)	0.000634 B (0.00000739)	0.00034 B (0.0000081)	---
PCB-130 (2,2',3,3',4,5'-HxCB)	0.0000217 J (0.00000527)	0.0000241 J (0.00000186)	0.0000278 J (0.00000285)	0.0000279 EMPC J (0.0000118)	0.0000179 EMPC J (0.00000954)	0.000016 EMPC J (0.000011)	---
PCB-131 (2,2',3,3',4,6-HxCB)	U (0.0000054)	0.00000455 EMPC J (0.00000191)	0.000008 J (0.00000292)	U (0.0000121)	U (0.00000977)	U (0.000011)	---
PCB-132 (2,2',3,3',4,6'-HxCB)	0.000164 (0.00000514)	0.000188 (0.00000182)	0.000183 (0.00000278)	0.000265 J (0.0000115)	0.000216 J (0.0000093)	0.00013 J (0.00001)	---
PCB-133 (2,2',3,3',5,5'-HxCB)	0.00000661 JQ (0.00000495)	0.0000084 J (0.00000175)	0.0000126 JQ (0.00000268)	U (0.0000111)	U (0.00000897)	U (0.0000099)	---
PCB-134 (2,2',3,3',5,6-HxCB)	0.0000326 EMPC J (0.00000527)	0.0000384 J (0.00000187)	0.0000384 J (0.00000286)	0.0000518 J (0.0000118)	0.0000353 J (0.00000955)	0.000018 EMPC J (0.000011)	---
PCB-135 (2,2',3,3',5,6'-HxCB)	0.000237 (0.00000648)	0.00027 (0.00000177)	0.000277 (0.00000178)	0.000314 J (0.0000131)	0.000265 J (0.0000101)	0.00018 J (0.000011)	---
PCB-136 (2,2',3,3',6,6'-HxCB)	0.0000954 (0.00000476)	0.000108 (0.0000013)	0.000112 (0.00000131)	0.00014 J (0.00000963)	0.000112 J (0.00000744)	0.000058 EMPC J (0.0000078)	---
PCB-137 (2,2',3,4,4',5-HxCB)	0.00000848 JQ (0.00000454)	0.00000907 JQ (0.00000161)	0.0000149 JQ (0.00000246)	U (0.0000102)	0.00000929 JQ (0.00000823)	U (0.0000091)	---
PCB-138 (2,2',3,4,4',5'-HxCB)	0.000451 B (0.00000408)	0.000531 B (0.00000144)	0.000477 B (0.00000221)	0.000804 B (0.00000913)	0.000634 B (0.00000739)	0.00034 B (0.0000081)	---
PCB-139 (2,2',3,4,4',6-HxCB)	0.0000059 EMPC J (0.00000452)	0.00000509 EMPC J (0.0000016)	0.00000794 EMPC J (0.00000245)	U (0.0000101)	UB (0.00000818)	U (0.000009)	---
PCB-140 (2,2',3,4,4',6'-HxCB)	0.0000059 EMPC J (0.00000452)	0.00000509 EMPC J (0.0000016)	0.00000794 EMPC J (0.00000245)	U (0.0000101)	UB (0.00000818)	U (0.000009)	---
PCB-141 (2,2',3,4,5,5'-HxCB)	0.000117 (0.0000047)	0.000123 (0.00000166)	0.000117 (0.00000255)	0.000165 J (0.0000105)	0.000136 J (0.00000852)	0.000067 J (0.0000094)	---
PCB-143 (2,2',3,4,5,6'-HxCB)	0.0000326 EMPC J (0.00000527)	0.0000384 J (0.00000187)	0.0000384 J (0.00000286)	0.0000518 J (0.0000118)	0.0000353 J (0.00000955)	0.000018 EMPC J (0.000011)	---
PCB-144 (2,2',3,4,5',6-HxCB)	0.0000305 EMPC J (0.00000601)	0.0000258 J (0.00000164)	0.0000339 J (0.00000166)	0.0000405 J (0.0000122)	0.0000266 EMPC J (0.0000094)	0.000026 J (0.0000098)	---
PCB-146 (2,2',3,4',5,5'-HxCB)	0.0000719 J (0.00000429)	0.0000746 (0.00000152)	0.0000785 (0.00000232)	0.0000984 EMPC J (0.0000096)	0.0000881 J (0.00000777)	0.00005 EMPC J (0.0000086)	---
PCB-147 (2,2',3,4',5,6-HxCB)	0.000451 B (0.00000439)	0.000542 (0.00000155)	0.000464 (0.00000238)	0.000816 B (0.00000982)	0.000698 B (0.00000795)	0.00033 B (0.0000088)	---
PCB-148 (2,2',3,4',5,6'-HxCB)	U (0.00000636)	U (0.00000174)	U (0.00000175)	U (0.0000129)	U (0.00000994)	U (0.00001)	---
PCB-149 (2,2',3,4',5',6-HxCB)	0.000451 B (0.00000439)	0.000542 (0.00000155)	0.000464 (0.00000238)	0.000816 B (0.00000982)	0.000698 B (0.00000795)	0.00033 B (0.0000088)	---
PCB-150 (2,2',3,4',6,6'-HxCB)	U (0.00000443)	U (0.00000121)	U (0.00000122)	U (0.00000897)	U (0.00000693)	U (0.0000072)	---
PCB-151 (2,2',3,5,5',6-HxCB)	0.000237 (0.00000648)	0.00027 (0.00000177)	0.000277 (0.00000178)	0.000314 J (0.0000131)	0.000265 J (0.0000101)	0.00018 J (0.000011)	---
PCB-152 (2,2',3,5,6,6'-HxCB)	U (0.00000452)	U (0.00000124)	U (0.00000124)	U (0.00000915)	U (0.00000707)	U (0.0000074)	---
PCB-153 (2,2',4,4',5,5'-HxCB)	0.000414 B (0.00000353)	0.000486 (0.00000125)	0.000434 (0.00000191)	0.00073 B (0.00000789)	0.000612 B (0.00000639)	0.00028 B (0.000007)	---

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04
ENVIRON Sample ID	DUP-20101019	MB-MW-04-20110113	DUP-20110113	MB-MW-04-20110413	DUP-20110413	MB-MW-04-20110727	DUP-072711-20110727
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	10/19/2010	1/13/2011	1/13/2011	4/13/2011	4/13/2011	7/27/2011	7/27/2011
Comments	Field Duplicate		Field Duplicate		Field Duplicate		Field Duplicate
PCB-154 (2,2',4,4',5,6'-HxCB)	U (0.00000527)	0.00000312 EMPC J (0.00000144)	0.00000309 EMPC J (0.00000145)	U (0.0000107)	U (0.00000824)	U (0.0000086)	---
PCB-155 (2,2',4,4',6,6'-HxCB)	U (0.00000431)	U (0.00000118)	U (0.00000119)	U (0.00000872)	U (0.00000674)	U (0.000007)	---
PCB-156 (2,3,3',4,4',5-HxCB)	0.0000329 J (0.00000425)	0.0000429 J (0.00000159)	0.0000482 (0.00000216)	0.0000442 JQ (0.00000953)	0.0000394 J (0.00000755)	0.000018 JQ (0.0000083)	---
PCB-157 (2,3,3',4,4',5'-HxCB)	0.0000329 J (0.00000425)	0.0000429 J (0.00000159)	0.0000482 (0.00000216)	0.0000442 EMPC J (0.00000953)	0.0000394 J (0.00000755)	0.000018 EMPC J (0.0000083)	---
PCB-158 (2,3,3',4,4',6-HxCB)	0.0000473 J (0.00000322)	0.0000458 (0.00000114)	0.0000487 (0.00000174)	0.0000557 EMPC J (0.00000721)	0.0000495 J (0.00000583)	0.000033 EMPC J (0.0000064)	---
PCB-159 (2,3,3',4,5,5'-HxCB)	0.00000489 EMPC J (0.00000345)	0.00000528 J (0.00000122)	0.00000721 J (0.00000187)	U (0.00000773)	U (0.00000625)	U (0.0000069)	---
PCB-160 (2,3,3',4,5,6-HxCB)	0.000451 B (0.00000408)	0.000531 B (0.00000144)	0.000477 B (0.00000221)	0.000804 B (0.00000913)	0.000634 B (0.00000739)	0.00034 B (0.0000081)	---
PCB-162 (2,3,3',4',5,5'-HxCB)	U (0.00000341)	0.0000025 EMPC J (0.00000121)	0.00000189 EMPC J (0.00000185)	U (0.00000763)	U (0.00000618)	U (0.0000068)	---
PCB-163 (2,3,3',4',5,6-HxCB)	0.000451 B (0.00000408)	0.000531 B (0.00000144)	0.000477 B (0.00000221)	0.000804 B (0.00000913)	0.000634 B (0.00000739)	0.00034 B (0.0000081)	---
PCB-164 (2,3,3',4',5',6-HxCB)	0.0000362 J (0.00000359)	0.0000366 J (0.00000127)	0.0000391 J (0.00000195)	0.0000382 EMPC J (0.00000804)	UB (0.00000651)	0.000018 J (0.0000072)	---
PCB-166 (2,3,4,4',5,6-HxCB)	0.0000529 J (0.00000395)	0.00006 (0.0000014)	0.0000621 (0.00000214)	0.0000786 J (0.00000883)	0.0000647 EMPC J (0.00000715)	0.00004 J (0.0000079)	---
PCB-167 (2,3',4,4',5,5'-HxCB)	0.0000135 J (0.0000025)	0.000013 J (0.000000876)	0.0000174 J (0.00000149)	0.0000184 J (0.00000609)	0.0000161 J (0.00000509)	U (0.0000052)	---
PCB-168 (2,3',4,4',5',6-HxCB)	0.000414 B (0.00000353)	0.000486 (0.00000125)	0.000434 (0.00000191)	0.00073 B (0.00000789)	0.000612 B (0.00000639)	0.00028 B (0.000007)	---
PCB-169 (3,3',4,4',5,5'-HxCB)	U (0.0000028)	U (0.00000093)	U (0.00000149)	U (0.0000057)	U (0.00000459)	U (0.0000056)	---
PCB-206 (2,2',3,3',4,4',5,5',6-NoCB)	0.000731 (0.00000372)	0.00109 (0.00000104)	0.000977 (0.00000168)	0.00127 (0.0000158)	0.000982 (0.0000136)	0.00032 EMPC (0.0000009)	---
PCB-207 (2,2',3,3',4,4',5,6,6'-NoCB)	0.0000694 J (0.0000027)	0.0000884 (0.000000745)	0.0000984 (0.00000123)	0.000106 J (0.0000112)	0.000074 J (0.0000094)	0.000034 EMPC J (0.0000066)	---
PCB-208 (2,2',3,3',4,5,5',6,6'-NoCB)	0.000283 (0.00000285)	0.000407 (0.000000777)	0.000383 (0.0000013)	0.00047 (0.0000116)	0.000352 J (0.00000961)	0.00013 EMPC J (0.000007)	---
PCB-194 (2,2',3,3',4,4',5,5'-OcCB)	0.0002 (0.00000314)	0.000214 (0.000000986)	0.000213 (0.00000215)	0.000251 J (0.00000618)	0.00018 J (0.0000049)	0.000079 J (0.0000069)	---
PCB-195 (2,2',3,3',4,4',5,6-OcCB)	0.0000337 EMPC J (0.00000341)	0.0000332 J (0.00000107)	0.0000439 J (0.00000234)	UB (0.00000671)	UB (0.00000532)	U (0.0000074)	---
PCB-196 (2,2',3,3',4,4',5,6'-OcCB)	0.0000836 EMPC (0.00000483)	0.000103 (0.00000121)	0.000108 (0.00000175)	0.000101 J (0.00000922)	UB (0.00000761)	0.000027 EMPC J (0.0000093)	---
PCB-197 (2,2',3,3',4,4',6,6'-OcCB)	U (0.0000036)	0.00000344 J (0.000000902)	0.00000631 EMPC J (0.0000013)	U (0.00000686)	U (0.00000567)	U (0.0000069)	---
PCB-198 (2,2',3,3',4,5,5',6-OcCB)	0.000515 (0.00000499)	0.000631 (0.00000125)	0.000633 (0.0000018)	0.000754 (0.00000952)	0.000545 (0.00000786)	0.00021 (0.0000096)	---
PCB-199 (2,2',3,3',4,5,5',6'-OcCB)	0.000515 (0.00000499)	0.000631 (0.00000125)	0.000633 (0.0000018)	0.000754 (0.00000952)	0.000545 (0.00000786)	0.00021 (0.0000096)	---
PCB-200 (2,2',3,3',4,5,6,6'-OcCB)	0.0000261 EMPC J (0.00000353)	0.0000339 J (0.000000886)	0.0000382 J (0.00000128)	0.0000351 J (0.00000674)	0.0000274 J (0.00000556)	U (0.0000068)	---
PCB-201 (2,2',3,3',4,5',6,6'-OcCB)	0.0000342 EMPC J (0.00000341)	0.0000468 (0.000000855)	0.0000517 (0.00000123)	0.0000476 J (0.0000065)	0.0000354 J (0.00000537)	0.000022 J (0.0000065)	---
PCB-202 (2,2',3,3',5,5',6,6'-OcCB)	0.000156 (0.00000384)	0.000191 (0.000000963)	0.000182 (0.00000139)	0.000211 J (0.00000733)	0.000159 J (0.00000605)	0.000098 J (0.0000074)	---
PCB-203 (2,2',3,4,4',5,5',6-OcCB)	0.000339 (0.00000445)	0.000489 (0.00000112)	0.000449 (0.00000161)	0.000516 (0.0000085)	0.000401 J (0.00000702)	0.00016 J (0.0000086)	---
PCB-204 (2,2',3,4,4',5,6,6'-OcCB)	U (0.00000374)	U (0.000000938)	U (0.00000135)	U (0.00000713)	U (0.00000589)	U (0.0000072)	---
PCB-205 (2,3,3',4,4',5,5',6-OcCB)	U (0.00000265)	0.00000404 EMPC J (0.000000831)	0.00000527 EMPC J (0.00000181)	U (0.00000521)	U (0.00000413)	U (0.0000058)	---
PCB-24/27	---	---	---	---	---	---	---
PCB-42/59	---	---	---	---	---	---	---
PCB-52/69	---	---	---	---	---	---	---
PCB-61/70	---	---	---	---	---	---	---
PCB-90/101	---	---	---	---	---	---	---
PCB-107/109	---	---	---	---	---	---	---
PCB-132/161	---	---	---	---	---	---	---
PCB-133/142	---	---	---	---	---	---	---
PCB-138/163/164	---	---	---	---	---	---	---
PCB-196/203	---	---	---	---	---	---	---
PCB-082 (2,2',3,3',4-PeCB)	0.0000529 J (0.000006)	0.0000605 (0.0000021)	0.0000524 (0.00000198)	0.0000336 EMPC J (0.0000122)	0.0000401 EMPC J (0.00000994)	0.000036 EMPC J (0.0000095)	---
PCB-083 (2,2',3,3',5-PeCB)	0.000241 (0.00000504)	0.000346 (0.00000177)	0.000283 (0.00000166)	0.000353 J (0.0000103)	0.000272 EMPC J (0.00000835)	0.00021 EMPC (0.000008)	---
PCB-084 (2,2',3,3',6-PeCB)	0.000176 (0.00000573)	0.000229 (0.00000201)	0.000224 (0.00000189)	0.000264 J (0.0000117)	0.000225 EMPC J (0.00000949)	0.00018 EMPC J (0.0000091)	---
PCB-085 (2,2',3,4,4'-PeCB)	0.0000677 J (0.00000415)	0.0000726 (0.00000145)	0.0000635 (0.00000137)	0.0000691 J (0.00000845)	0.0000597 J (0.00000688)	0.000042 EMPC J (0.0000066)	---
PCB-086 (2,2',3,4,5-PeCB)	0.000277 (0.00000425)	0.000349 (0.00000149)	0.000291 EMPC (0.0000014)	UB (0.00000864)	UB (0.00000704)	0.00029 EMPC (0.0000067)	---
PCB-087 (2,2',3,4,5'-PeCB)	0.000277 (0.00000425)	0.000349 (0.00000149)	0.000291 Q (0.0000014)	0.000331 BJQ (0.00000864)	0.000279 BJQ (0.00000704)	0.00029 Q (0.0000067)	---
PCB-088 (2,2',3,4,6-PeCB)	0.0000836 (0.00000511)	0.000105 (0.00000179)	0.000107 (0.00000168)	0.000122 J (0.0000104)	0.0000805 EMPC J (0.00000846)	0.000088 EMPC J (0.0000081)	---
PCB-089 (2,2',3,4,6'-PeCB)	U (0.00000555)	0.00000618 J (0.00000194)	0.0000105 J (0.00000183)	U (0.0000113)	U (0.00000919)	U (0.0000088)	---
PCB-090 (2,2',3,4',5-PeCB)	0.000496 B (0.00000432)	0.000697 B (0.00000151)	0.000569 B (0.00000143)	0.000776 B (0.0000088)	0.000697 B (0.00000716)	0.00051 B (0.0000068)	---
PCB-097 (2,2',3,4',5'-PeCB)	0.000277 (0.00000425)	0.000349 (0.00000149)	0.000291 EMPC (0.0000014)	UB (0.00000864)	UB (0.00000704)	0.00029 EMPC (0.0000067)	---
PCB-091 (2,2',3,4',6-PeCB)	0.0000836 (0.00000511)	0.000105 (0.00000179)	0.000107 (0.00000168)	0.000122 J (0.0000104)	0.0000805 JQ (0.00000846)	0.000088 JQ (0.0000081)	---
PCB-098 (2,2',3,4',6'-PeCB)	0.0000241 J (0.00000478)	0.0000366 J (0.00000167)	0.0000384 J (0.00000157)	0.0000302 EMPC J (0.00000972)	0.000026 EMPC J (0.00000791)	0.000028 EMPC J (0.0000076)	---
PCB-092 (2,2',3,5,5'-PeCB)	0.000106 (0.00000491)	0.000137 (0.00000172)	0.000127 (0.00000162)	0.000137 J (0.00000999)	0.00013 J (0.00000813)	0.00011 J (0.0000078)	---
PCB-093 (2,2',3,5,6-PeCB)	0.00000583 EMPC J (0.00000493)	0.0000159 J (0.00000173)	0.00000815 EMPC J (0.00000162)	U (0.00001)	UB (0.00000816)	0.000012 EMPC J (0.0000078)	---
PCB-094 (2,2',3,5,6'-PeCB)	0.0000103 EMPC J (0.00000555)	0.0000139 J (0.00000194)	0.0000158 J (0.00000183)	U (0.0000113)	U (0.00000919)	U (0.0000088)	---
PCB-095 (2,2',3,5',6-PeCB)	0.000607 (0.00000522)	0.000859 (0.00000183)	0.000729 (0.00000172)	0.000982 (0.0000106)	0.000875 (0.00000865)	0.00071 (0.0000083)	---
PCB-096 (2,2',3,6,6'-PeCB)	0.00000932 EMPC J (0.00000415)	0.0000113 EMPC J (0.00000145)	0.0000179 J (0.00000137)	0.000018 J (0.00000844)	0.0000168 EMPC J (0.00000687)	U (0.0000066)	---
PCB-099 (2,2',4,4',5-PeCB)	0.000241 (0.00000504)	0.000346 (0.00000177)	0.000283 (0.00000166)	0.000353 J (0.0000103)	0.000272 JQ (0.00000835)	0.00021 Q (0.0000008)	---
PCB-100 (2,2',4,4',6-PeCB)	0.00000583 EMPC J (0.00000493)	0.0000159 J (0.00000173)	0.00000815 EMPC J (0.00000162)	U (0.00001)	UB (0.00000816)	0.000012 EMPC J (0.0000078)	---
PCB-101 (2,2',4,5,5'-PeCB)	0.000496 B (0.00000432)	0.000697 B (0.00000151)	0.000569 B (0.00000143)	0.000776 B (0.0000088)	0.000697 B (0.00000716)	0.00051 B (0.0000068)	---
PCB-102 (2,2',4,5,6'-PeCB)	0.0000241 J (0.00000478)	0.0000366 J (0.00000167)	0.0000384 J (0.00000157)	0.0000302 JQ (0.00000972)	0.000026 JQ (0.00000791)	0.000028 JQ (0.0000076)	---

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04
ENVIRON Sample ID	DUP-20101019	MB-MW-04-20110113	DUP-20110113	MB-MW-04-20110413	DUP-20110413	MB-MW-04-20110727	DUP-072711-20110727
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	10/19/2010	1/13/2011	1/13/2011	4/13/2011	4/13/2011	7/27/2011	7/27/2011
Comments	Field Duplicate		Field Duplicate		Field Duplicate		Field Duplicate
PCB-103 (2,2',4,5',6-PeCB)	0.00000942 EMPC J (0.00000486)	0.0000102 J (0.0000017)	0.0000156 J (0.0000016)	U (0.0000099)	U (0.00000805)	U (0.0000077)	---
PCB-104 (2,2',4,6,6'-PeCB)	U (0.0000037)	U (0.00000129)	U (0.00000122)	U (0.00000752)	U (0.00000612)	U (0.0000058)	---
PCB-105 (2,3,3',4,4'-PeCB)	0.0000757 J (0.00000255)	0.0000961 (0.00000121)	0.000105 (0.00000217)	UB (0.00000559)	UB (0.00000423)	0.000061 J (0.0000055)	---
PCB-108 (2,3,3',4,5'-PeCB)	0.00000976 EMPC J (0.00000279)	0.0000096 EMPC J (0.00000127)	0.0000146 J (0.00000229)	UB (0.00000593)	UB (0.00000456)	U (0.0000058)	---
PCB-109 (2,3,3',4,6-PeCB)	0.000277 (0.00000425)	0.000349 (0.00000149)	0.000291 EMPC (0.0000014)	UB (0.00000864)	UB (0.00000704)	0.00029 EMPC (0.0000067)	---
PCB-107 (2,3,3',4',5-PeCB)	0.000019 J (0.00000265)	0.0000241 EMPC J (0.00000121)	0.0000339 J (0.00000217)	UB (0.00000564)	UB (0.00000433)	0.000022 EMPC J (0.0000055)	---
PCB-110 (2,3,3',4',6-PeCB)	0.000487 B (0.00000367)	0.00068 B (0.00000128)	0.000539 B (0.00000121)	0.000725 (0.00000746)	0.000696 (0.00000607)	0.00053 B (0.0000058)	---
PCB-111 (2,3,3',5,5'-PeCB)	U (0.00000347)	U (0.00000122)	0.00000237 J (0.00000115)	U (0.00000707)	U (0.00000575)	U (0.0000055)	---
PCB-113 (2,3,3',5',6-PeCB)	0.000496 B (0.00000432)	0.000697 B (0.00000151)	0.000569 B (0.00000143)	0.000776 B (0.0000088)	0.000697 B (0.00000716)	0.00051 B (0.0000068)	---
PCB-114 (2,3,4,4',5-PeCB)	U (0.00000244)	0.00000637 J (0.00000109)	0.00000689 EMPC J (0.00000199)	U (0.00000527)	U (0.00000412)	U (0.0000052)	---
PCB-115 (2,3,4,4',6-PeCB)	0.000487 B (0.00000367)	0.00068 B (0.00000128)	0.000539 B (0.00000121)	0.000725 (0.00000746)	0.000696 (0.00000607)	0.00053 B (0.0000058)	---
PCB-116 (2,3,4,5,6-PeCB)	0.0000677 J (0.00000415)	0.0000726 (0.00000145)	0.0000635 (0.00000137)	0.0000691 J (0.00000845)	0.0000597 J (0.00000688)	0.000042 JQ (0.0000066)	---
PCB-117 (2,3,4',5,6-PeCB)	0.0000677 J (0.00000415)	0.0000726 (0.00000145)	0.0000635 (0.00000137)	0.0000691 J (0.00000845)	0.0000597 J (0.00000688)	0.000042 EMPC J (0.0000066)	---
PCB-118 (2,3',4,4',5-PeCB)	0.000223 B (0.00000247)	0.00033 B (0.00000113)	0.000335 B (0.00000201)	0.000435 (0.00000556)	0.000346 J (0.00000416)	0.00024 B (0.0000053)	---
PCB-119 (2,3',4,4',6-PeCB)	0.000277 (0.00000425)	0.000349 (0.00000149)	0.000291 EMPC (0.0000014)	UB (0.00000864)	UB (0.00000704)	0.00029 EMPC (0.0000067)	---
PCB-120 (2,3',4,5,5'-PeCB)	U (0.00000358)	0.00000222 EMPC J (0.00000125)	0.00000264 EMPC J (0.00000118)	U (0.00000727)	U (0.00000592)	U (0.0000057)	---
PCB-121 (2,3',4,5',6-PeCB)	U (0.0000036)	U (0.00000126)	U (0.00000119)	U (0.00000733)	U (0.00000597)	U (0.0000057)	---
PCB-122 (2,3,3',4',5'-PeCB)	U (0.00000298)	0.00000354 JQ (0.00000135)	0.00000484 JQ (0.00000244)	U (0.00000633)	U (0.00000486)	U (0.0000062)	---
PCB-123 (2,3',4,4',5'-PeCB)	0.00000317 EMPC J (0.0000028)	0.00000388 EMPC J (0.00000121)	0.0000053 J (0.00000223)	U (0.00000579)	U (0.0000046)	U (0.0000056)	---
PCB-124 (2,3',4',5,5'-PeCB)	0.00000976 EMPC J (0.00000279)	0.0000096 EMPC J (0.00000127)	0.0000146 J (0.00000229)	UB (0.00000593)	UB (0.00000456)	U (0.0000058)	---
PCB-125 (2,3',4',5',6-PeCB)	0.000277 (0.00000425)	0.000349 (0.00000149)	0.000291 EMPC (0.0000014)	UB (0.00000864)	UB (0.00000704)	0.00029 EMPC (0.0000067)	---
PCB-126 (3,3',4,4',5-PeCB)	U (0.00000291)	U (0.00000134)	0.00000606 J (0.00000237)	U (0.00000569)	U (0.00000434)	U (0.0000057)	---
PCB-127 (3,3',4,5,5'-PeCB)	U (0.0000027)	U (0.00000123)	U (0.00000221)	U (0.00000574)	U (0.00000442)	U (0.0000056)	---
PCB-040 (2,2',3,3'-TeCB)	0.000609 (0.00000422)	0.000747 (0.00000171)	0.000693 (0.00000276)	0.000963 B (0.0000106)	0.00097 EMPC (0.00000772)	0.00078 (0.000008)	---
PCB-041 (2,2',3,4-TeCB)	0.000609 (0.00000422)	0.000747 (0.00000171)	0.000693 (0.00000276)	0.000963 B (0.0000106)	0.00097 EMPC (0.00000772)	0.00078 (0.000008)	---
PCB-042 (2,2',3,4'-TeCB)	0.000263 (0.00000429)	0.000356 (0.00000174)	0.000363 (0.00000281)	0.000455 B (0.0000108)	0.000414 BJ (0.00000786)	0.00037 (0.0000081)	---
PCB-043 (2,2',3,5-TeCB)	0.0000496 EMPC J (0.00000394)	0.0000688 (0.00000159)	0.0000827 (0.00000258)	UB (0.00000995)	UB (0.00000722)	0.000077 J (0.0000075)	---
PCB-044 (2,2',3,5'-TeCB)	0.0012 B (0.00000377)	0.00186 B (0.00000153)	0.00189 B (0.00000247)	0.00221 B (0.00000952)	0.00203 B (0.00000691)	0.0017 B (0.0000072)	---
PCB-045 (2,2',3,6-TeCB)	0.000599 B (0.00000437)	0.000924 (0.00000177)	0.00089 (0.00000287)	0.0011 (0.000011)	0.00103 (0.000008)	0.00098 (0.0000083)	---
PCB-046 (2,2',3,6'-TeCB)	0.000308 (0.00000517)	0.000416 (0.00000209)	0.000441 (0.00000339)	0.000493 (0.000013)	0.000485 (0.00000946)	0.00046 (0.0000098)	---
PCB-047 (2,2',4,4'-TeCB)	0.0012 B (0.00000377)	0.00186 B (0.00000153)	0.00189 B (0.00000247)	0.00221 B (0.00000952)	0.00203 B (0.00000691)	0.0017 B (0.0000072)	---
PCB-048 (2,2',4,5-TeCB)	0.000192 (0.00000419)	0.000212 (0.00000169)	0.000224 (0.00000274)	0.000255 BJ (0.0000106)	0.000227 BJ (0.00000766)	0.00023 (0.0000079)	---
PCB-049 (2,2',4,5'-TeCB)	0.000886 B (0.00000348)	0.00143 (0.00000141)	0.00151 (0.00000228)	0.00174 B (0.00000877)	0.00156 B (0.00000636)	0.0014 B (0.0000066)	---
PCB-050 (2,2',4,6-TeCB)	0.00093 (0.00000406)	0.00154 (0.00000164)	0.0015 (0.00000266)	0.00174 B (0.0000102)	0.00165 B (0.00000743)	0.0016 (0.0000077)	---
PCB-051 (2,2',4,6'-TeCB)	0.000599 B (0.00000437)	0.000924 (0.00000177)	0.00089 (0.00000287)	0.0011 (0.000011)	0.00103 (0.000008)	0.00098 (0.0000083)	---
PCB-052 (2,2',5,5'-TeCB)	0.00165 B (0.00000407)	0.0026 B (0.00000165)	0.00268 B (0.00000267)	0.00308 B (0.0000103)	0.00287 B (0.00000744)	0.0026 B (0.0000077)	---
PCB-053 (2,2',5,6'-TeCB)	0.00093 (0.00000406)	0.00154 (0.00000164)	0.0015 (0.00000266)	0.00174 B (0.0000102)	0.00165 B (0.00000743)	0.0016 (0.0000077)	---
PCB-054 (2,2',6,6'-TeCB)	0.00014 (0.00000481)	0.000189 (0.0000019)	0.000196 (0.00000194)	0.000157 J (0.0000126)	0.000176 J (0.00000988)	0.00021 (0.00001)	---
PCB-055 (2,3,3',4-TeCB)	0.00000795 EMPC J (0.00000327)	0.0000155 J (0.00000132)	0.0000187 EMPC J (0.00000214)	0.0000228 J (0.00000825)	0.0000165 J (0.00000598)	0.000033 J (0.0000062)	---
PCB-056 (2,3,3',4'-TeCB)	0.000189 B (0.00000308)	0.000201 (0.00000124)	0.000198 (0.00000201)	0.000281 BJ (0.00000776)	0.000245 BJ (0.00000563)	0.00021 B (0.0000058)	---
PCB-057 (2,3,3',5-TeCB)	0.0000076 J (0.00000311)	0.00000634 J (0.00000126)	0.00000954 J (0.00000204)	U (0.00000785)	UB (0.00000567)	U (0.0000059)	---
PCB-058 (2,3,3',5'-TeCB)	0.00000278 EMPC J (0.0000031)	0.00000261 J (0.00000125)	0.0000038 EMPC J (0.00000203)	U (0.00000782)	UB (0.00000567)	U (0.0000059)	---
PCB-059 (2,3,3',6-TeCB)	0.000105 B (0.000003)	0.000125 (0.00000122)	0.000133 (0.00000197)	UB (0.00000758)	UB (0.0000055)	0.00012 EMPC J (0.0000057)	---
PCB-060 (2,3,4,4'-TeCB)	0.0000853 (0.00000317)	0.0000894 (0.00000128)	0.0000951 (0.00000208)	0.000113 J (0.00000799)	0.000103 J (0.0000058)	0.000076 J (0.000006)	---
PCB-061 (2,3,4,5-TeCB)	0.000685 B (0.000003)	0.000924 B (0.00000121)	0.000839 B (0.00000197)	0.00122 B (0.00000758)	0.00112 B (0.00000549)	0.00083 B (0.0000057)	---
PCB-062 (2,3,4,6-TeCB)	0.000105 B (0.000003)	0.000125 (0.00000122)	0.000133 (0.00000197)	UB (0.00000758)	UB (0.0000055)	0.00012 EMPC J (0.0000057)	---
PCB-063 (2,3,4',5-TeCB)	0.0000261 J (0.00000289)	0.0000291 J (0.00000117)	0.0000346 J (0.00000189)	0.0000386 J (0.00000728)	0.0000327 J (0.00000528)	0.000025 EMPC J (0.0000055)	---
PCB-064 (2,3,4',6-TeCB)	0.000322 (0.00000284)	0.000366 (0.00000115)	0.000345 (0.00000186)	0.000494 B (0.00000718)	0.000434 B (0.00000521)	0.00038 B (0.0000054)	---
PCB-065 (2,3,5,6-TeCB)	0.0012 B (0.00000377)	0.00186 B (0.00000153)	0.00189 B (0.00000247)	0.00221 B (0.00000952)	0.00203 B (0.00000691)	0.0017 B (0.0000072)	---
PCB-066 (2,3',4,4'-TeCB)	0.000384 B (0.00000298)	0.000465 B (0.00000121)	0.000447 B (0.00000195)	0.000643 B (0.00000753)	0.000567 B (0.00000546)	0.00045 B (0.0000057)	---
PCB-067 (2,3',4,5-TeCB)	0.00002 J (0.0000028)	0.0000181 J (0.00000113)	0.0000232 J (0.00000183)	UB (0.00000706)	UB (0.00000512)	0.000014 EMPC J (0.0000053)	---
PCB-068 (2,3',4,5'-TeCB)	UB (0.00000282)	0.0000158 BJ (0.00000114)	0.0000224 BJ (0.00000185)	U (0.00000712)	UB (0.00000516)	0.000012 EMPC J (0.0000053)	---
PCB-069 (2,3',4,6-TeCB)	0.000886 B (0.00000348)	0.00143 (0.00000141)	0.00151 (0.00000228)	0.00174 B (0.00000877)	0.00156 B (0.00000636)	0.0014 B (0.0000066)	---
PCB-070 (2,3',4',5-TeCB)	0.000685 B (0.000003)	0.000924 B (0.00000121)	0.000839 B (0.00000197)	0.00122 B (0.00000758)	0.00112 B (0.00000549)	0.00083 B (0.0000057)	---
PCB-076 (2,3',4',5'-TeCB)	0.000685 B (0.000003)	0.000924 B (0.00000121)	0.000839 B (0.00000197)	0.00122 B (0.00000758)	0.00112 B (0.00000549)	0.00083 B (0.0000057)	---
PCB-071 (2,3',4',6-TeCB)	0.000609 (0.00000422)	0.000747 (0.00000171)	0.000693 (0.00000276)	0.000963 B (0.0000106)	0.00097 EMPC (0.00000772)	0.00078 (0.000008)	---
PCB-072 (2,3',5,5'-TeCB)	0.0000115 EMPC J (0.00000303)	0.0000161 J (0.00000122)	0.0000205 EMPC J (0.00000198)	0.000022 J (0.00000764)	0.0000184 EMPC J (0.00000554)	0.000016 EMPC J (0.0000057)	---
PCB-073 (2,3',5',6-TeCB)	0.0000496 EMPC J (0.00000394)	0.0000688 (0.00000159)	0.0000827 (0.00000258)	UB (0.00000995)	UB (0.00000722)	0.000077 J (0.0000075)	---
PCB-074 (2,4,4',5-TeCB)	0.000685 B (0.000003)	0.000924 B (0.00000121)	0.000839 B (0.00000197)	0.00122 B (0.00000758)	0.00112 B (0.00000549)	0.00083 B (0.0000057)	---
PCB-075 (2,4,4',6-TeCB)	0.000105 B (0.000003)	0.000125 (0.00000122)	0.000133 (0.00000197)	UB (0.00000758)	UB (0.0000055)	0.00012 EMPC J (0.0000057)	---
PCB-077 (3,3',4,4'-TeCB)	0.0000266 J (0.00000298)	0.0000229 J (0.00000119)	0.0000292 J (0.00000199)	UB (0.0000073)	UB (0.00000526)	0.000022 EMPC J (0.0000055)	---

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04
ENVIRON Sample ID	DUP-20101019	MB-MW-04-20110113	DUP-20110113	MB-MW-04-20110413	DUP-20110413	MB-MW-04-20110727	DUP-072711-20110727
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	10/19/2010	1/13/2011	1/13/2011	4/13/2011	4/13/2011	7/27/2011	7/27/2011
Comments	Field Duplicate		Field Duplicate		Field Duplicate		Field Duplicate
PCB-078 (3,3',4,5-TeCB)	U (0.00000322)	U (0.0000013)	U (0.00000211)	U (0.00000812)	U (0.00000589)	U (0.0000061)	---
PCB-079 (3,3',4,5'-TeCB)	U (0.00000282)	0.00000557 J (0.00000114)	0.00000612 EMPC J (0.00000185)	U (0.00000712)	U (0.00000517)	U (0.0000054)	---
PCB-081 (3,4,4',5-TeCB)	U (0.00000285)	U (0.00000117)	U (0.00000184)	U (0.00000742)	U (0.00000541)	U (0.0000056)	---
PCB-016 (2,2',3-TrCB)	0.00312 (0.00000885)	0.00358 (0.00000301)	0.00364 (0.00000335)	0.00344 B (0.0000156)	0.0031 B (0.0000124)	0.0033 (0.000011)	---
PCB-017 (2,2',4-TrCB)	0.00388 (0.00000738)	0.00452 (0.00000251)	0.00488 (0.00000279)	0.00456 B (0.000013)	0.00417 B (0.0000104)	0.0045 (0.0000091)	---
PCB-018 (2,2',5-TrCB)	0.00817 B (0.00000654)	0.00926 B (0.00000223)	0.00945 B (0.00000247)	0.00891 B (0.0000115)	0.00829 B (0.00000919)	0.0089 B (0.0000081)	---
PCB-019 (2,2',6-TrCB)	0.00364 (0.00000905)	0.00437 (0.00000308)	0.00442 (0.00000342)	0.00422 (0.000016)	0.00409 (0.0000127)	0.0043 (0.0000011)	---
PCB-020 (2,3,3'-TrCB)	0.00229 B (0.00000302)	0.00314 B (0.00000154)	0.00353 B (0.00000296)	0.00362 B (0.00000519)	0.0035 B (0.00000437)	0.0032 B (0.0000058)	---
PCB-021 (2,3,4-TrCB)	0.00107 B (0.00000303)	0.00138 B (0.00000155)	0.00154 B (0.00000297)	0.0015 B (0.0000052)	0.00146 B (0.00000439)	0.0014 B (0.0000058)	---
PCB-022 (2,3,4'-TrCB)	0.000739 B (0.00000307)	0.00095 B (0.00000157)	0.00106 B (0.00000302)	0.00104 B (0.00000528)	0.001 B (0.00000446)	0.00095 B (0.0000059)	---
PCB-023 (2,3,5-TrCB)	0.00000583 EMPC J (0.00000313)	0.00000454 EMPC J (0.0000016)	U (0.00000308)	U (0.00000539)	U (0.00000454)	U (0.000006)	---
PCB-024 (2,3,6-TrCB)	0.000104 EMPC (0.00000618)	0.000153 (0.00000211)	0.000148 (0.00000234)	0.0000942 J (0.0000109)	0.0000764 J (0.0000087)	0.00011 J (0.0000077)	---
PCB-025 (2,3',4-TrCB)	0.00042 (0.0000028)	0.000654 (0.00000143)	0.000688 (0.00000274)	0.000676 B (0.0000048)	0.000663 B (0.00000405)	0.00069 (0.0000054)	---
PCB-026 (2,3',5-TrCB)	0.000785 B (0.00000297)	0.00122 (0.00000152)	0.00124 (0.00000291)	0.00123 B (0.0000051)	0.00121 B (0.0000043)	0.0012 B (0.0000057)	---
PCB-027 (2,3',6-TrCB)	0.00378 (0.00000534)	0.0045 (0.00000182)	0.0048 (0.00000202)	0.00442 (0.00000941)	0.00411 (0.0000075)	0.0045 (0.0000066)	---
PCB-028 (2,4,4'-TrCB)	0.00229 B (0.00000302)	0.00314 B (0.00000154)	0.00353 B (0.00000296)	0.00362 B (0.00000519)	0.0035 B (0.00000437)	0.0032 B (0.0000058)	---
PCB-030 (2,4,6-TrCB)	0.00817 B (0.00000654)	0.00926 B (0.00000223)	0.00945 B (0.00000247)	0.00891 B (0.0000115)	0.00829 B (0.00000919)	0.0089 B (0.0000081)	---
PCB-029 (2,4,5-TrCB)	0.000785 B (0.00000297)	0.00122 (0.00000152)	0.00124 (0.00000291)	0.00123 B (0.0000051)	0.00121 B (0.0000043)	0.0012 B (0.0000057)	---
PCB-031 (2,4',5-TrCB)	0.00227 B (0.00000295)	0.00346 B (0.00000151)	0.00339 B (0.00000289)	0.00354 B (0.00000506)	0.00343 B (0.00000427)	0.0032 B (0.0000056)	---
PCB-032 (2,4',6-TrCB)	0.0023 (0.00000523)	0.00278 (0.00000178)	0.00286 (0.00000198)	0.00262 (0.00000923)	0.00246 (0.00000736)	0.0027 (0.0000065)	---
PCB-033 (2,3',4'-TrCB)	0.00107 B (0.00000303)	0.00138 B (0.00000155)	0.00154 B (0.00000297)	0.0015 B (0.0000052)	0.00146 B (0.00000439)	0.0014 B (0.0000058)	---
PCB-034 (2,3',5'-TrCB)	0.0000216 J (0.00000309)	0.0000261 J (0.00000158)	0.0000324 J (0.00000303)	UB (0.0000053)	UB (0.00000447)	0.000021 EMPC J (0.0000059)	---
PCB-035 (3,3',4-TrCB)	0.0000165 EMPC J (0.00000317)	0.0000149 EMPC J (0.00000162)	0.0000203 J (0.00000311)	UB (0.00000545)	UB (0.0000046)	0.000015 J (0.0000061)	---
PCB-036 (3,3',5-TrCB)	U (0.00000306)	0.0000359 J (0.00000157)	0.000044 EMPC J (0.00000301)	U (0.00000527)	U (0.00000444)	U (0.0000059)	---
PCB-037 (3,4,4'-TrCB)	0.000302 B (0.00000315)	0.00034 (0.00000161)	0.00034 (0.00000309)	0.000403 BJ (0.0000054)	0.000384 BJ (0.00000456)	0.00034 (0.000006)	---
PCB-038 (3,4,5-TrCB)	U (0.00000323)	U (0.00000165)	U (0.00000317)	U (0.00000556)	U (0.00000469)	U (0.0000062)	---
PCB-039 (3,4',5-TrCB)	U (0.00000287)	U (0.00000147)	0.00000298 EMPC J (0.00000282)	UB (0.00000494)	U (0.00000417)	U (0.0000055)	---
PCB Aroclors							
PCBs (total)	U (0.00296)	0.0286 (0.00317)	0.0249 (0.00317)	U (0.0561)	U (0.0739)	U (0.0028)	U (0.0028)
Aroclor-1016	U (0.00254)	0.0286 (0.00272)	0.0249 (0.00272)	U (0.0373)	U (0.0468)	U (0.0024)	U (0.0024)
Aroclor-1242	U (0.00188)	U (0.00201)	U (0.00201)	U (0.0231)	U (0.0309)	U (0.0018)	U (0.0018)
Aroclor-1248	U (0.0023)	U (0.00245)	U (0.00245)	U (0.0424)	U (0.0173)	U (0.0022)	U (0.0021)
Aroclor-1260	U (0.00137)	U (0.00146)	U (0.00146)	U (0.00142)	U (0.0014)	U (0.0013)	U (0.0013)
Aroclor-1268	U (0.00274)	U (0.00293)	U (0.00293)	U (0.00285)	U (0.0028)	U (0.0026)	U (0.0026)
CDDF							
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	---	U (0.000000309)	U (0.000000344)	---	---	U (0.00000057)	---
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	---	U (0.000000245)	0.000000604 EMPC J (0.000000277)	---	---	U (0.00000047)	---
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	---	UB (0.000000256)	UB (0.000000482)	---	---	U (0.00000071)	---
Octachlorodibenzo-p-dioxin	---	UB (0.000000301)	UB (0.000000677)	---	---	UB (0.0000011)	---
2,3,7,8-Tetrachlorodibenzo-p-dioxin	---	U (0.000000134)	U (0.000000172)	---	---	U (0.00000037)	---
1,2,3,7,8-Pentachlorodibenzofuran	---	UB (0.00000018)	U (0.000000213)	---	---	U (0.00000042)	---
1,2,3,4,7,8-Hexachlorodibenzofuran	---	UB (0.000000197)	U (0.000000255)	---	---	U (0.00000037)	---
1,2,3,4,6,7,8-Heptachlorodibenzofuran	---	UB (0.000000156)	U (0.000000244)	---	---	U (0.00000044)	---
Octachlorodibenzofuran	---	0.00000274 BJQ (0.000000274)	0.00000282 BJQ (0.000000417)	---	---	U (0.00000071)	---

Notes:
1 All concentrations are presented in ug/L (ppb).
2 Only compounds with at least one detection are shown.

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04
ENVIRON Sample ID	DUP-20110727	MB-MW-04-20111027	DUP-20111027	MB-MW-04-20120425	DUP-20120425	MB-MW-04-20121018	DUP-20121018
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	7/27/2011	10/27/2011	10/27/2011	4/25/2012	4/25/2012	10/18/2012	10/18/2012
Comments	Field Duplicate		Field Duplicate		Field Duplicate		Field Duplicate
SVOC							
Acenaphthene	---	---	---	3.5 (0.2)	3 (0.2)	3.4 (2.2)	3.9 (2.2)
Acenaphthylene	---	---	---	0.18 J (0.2)	0.16 J (0.2)	U (2.2)	U (2.2)
Acetophenone	---	---	---	0.18 B (1)	0.17 B (1)	U (11)	U (11)
Anthracene	---	---	---	0.67 J (0.2)	0.44 J (0.2)	0.41 J (2.2)	0.46 J (2.2)
Benzaldehyde	---	---	---	0.8 J (1)	0.8 J (1)	U (11)	U (11)
Benzo(a)anthracene	---	---	---	U (0.2)	U (0.2)	U (2.2)	U (2.2)
Benzo(a)pyrene	---	---	---	U (0.2)	U (0.2)	U (2.2)	U (2.2)
Benzo(b)fluoranthene	---	---	---	UL (0.2)	UL (0.2)	U (2.2)	U (2.2)
Benzo(g,h,i)perylene	---	---	---	0.038 J (0.2)	U (0.2)	U (2.2)	U (2.2)
Benzo(k)fluoranthene	---	---	---	U (0.2)	U (0.2)	U (2.2)	U (2.2)
Biphenyl	---	---	---	0.11 B (1)	0.085 B (1)	U (11)	U (11)
bis(2-Chloroethyl) ether	---	---	---	U (0.2)	0.11 J (0.2)	U (2.2)	U (2.2)
bis(2-Ethylhexyl)phthalate	---	---	---	U (2)	U (2)	U (22)	U (22)
Butylbenzylphthalate	---	---	---	U (1)	U (1)	U (11)	U (11)
Caprolactam	---	---	---	U (5.1)	U (5.1)	U (55)	U (56)
Carbazole	---	---	---	2.9 J (0.2)	1.5 J (0.2)	U (2.2)	U (2.2)
4-Chloroaniline	---	---	---	U (1)	U (1)	U (11)	U (11)
2-Chlorophenol	---	---	---	UL (1)	UL (1)	U (11)	U (11)
4-Chlorophenyl-phenyl ether	---	---	---	U (1)	U (1)	U (11)	U (11)
Chrysene	---	---	---	U (0.2)	U (0.2)	U (2.2)	U (2.2)
Dibenz(a,h)anthracene	---	---	---	U (0.2)	U (0.2)	U (2.2)	U (2.2)
Dibenzofuran	---	---	---	U (1)	0.12 J (1)	U (11)	U (11)
2,4-Dichlorophenol	---	---	---	UL (0.2)	UL (0.2)	U (2.2)	U (2.2)
Diethylphthalate	---	---	---	U (1)	U (1)	U (11)	U (11)
2,4-Dimethylphenol	---	---	---	0.26 J (1)	UL (1)	U (11)	U (11)
Dimethylphthalate	---	---	---	U (1)	U (1)	U (11)	U (11)
Di-n-butylphthalate	---	---	---	U (1)	U (1)	U (11)	U (11)
Di-n-octylphthalate	---	---	---	U (1)	U (1)	U (11)	U (11)
Fluoranthene	---	---	---	0.23 (0.2)	0.15 J (0.2)	U (2.2)	U (2.2)
Fluorene	---	---	---	2.7 (0.2)	2.5 (0.2)	6.8 (2.2)	6.9 (2.2)
Indeno(1,2,3-cd)pyrene	---	---	---	0.37 J (0.2)	UJ (0.2)	U (2.2)	U (2.2)
Isophorone	---	---	---	U (1)	U (1)	U (11)	U (11)
2-Methylnaphthalene	---	---	---	0.088 B (0.2)	0.066 B (0.2)	U (2.2)	U (2.2)
2-Methylphenol	---	---	---	UL (1)	UL (1)	U (11)	U (11)
3&4-Methylphenol	---	---	---	0.21 J (1)	UL (1)	U (11)	U (11)
4-Methylphenol	---	---	---	---	---	---	---
Naphthalene	---	---	---	0.29 B (0.2)	0.19 B (0.2)	U (2.2)	U (2.2)
N-Nitrosodiphenylamine	---	---	---	U (1)	0.42 J (1)	U (11)	U (11)
Pentachlorophenol	---	---	---	UL (1)	UL (1)	U (11)	U (11)
Phenanthrene	---	---	---	0.37 (0.2)	0.23 (0.2)	U (2.2)	U (2.2)
Phenol	---	---	---	0.44 L (0.2)	0.38 L (0.2)	U (2.2)	U (2.2)
Pyrene	---	---	---	0.17 J (0.2)	U (0.2)	U (2.2)	U (2.2)
PCB Congeners							
13C12-PCB 114	---	0.00000754 EMPC J (0.0000421)	0.0000139 J (0.0000421)	---	---	---	---
PCB-001 (2-CB)	0.019 B (0.000002)	0.0159 B (0.0000421)	0.0179 B (0.0000421)	---	---	---	---
PCB-002 (3-CB)	0.00046 (0.0000023)	0.000397 B (0.0000421)	0.000457 B (0.0000421)	---	---	---	---
PCB-003 (4-CB)	0.0025 (0.0000025)	0.0023 B (0.0000421)	0.00254 B (0.0000421)	---	---	---	---

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04
ENVIRON Sample ID	DUP-20110727	MB-MW-04-20111027	DUP-20111027	MB-MW-04-20120425	DUP-20120425	MB-MW-04-20121018	DUP-20121018
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	7/27/2011	10/27/2011	10/27/2011	4/25/2012	4/25/2012	10/18/2012	10/18/2012
Comments	Field Duplicate		Field Duplicate		Field Duplicate		Field Duplicate
PCB-209 (DeCB)	0.00011 J (0.0000053)	0.000455 (0.0000421)	0.000469 (0.0000421)	---	---	---	---
PCB-004 (2,2'-DiCB)	0.045 (0.000012)	0.0326 B (0.0000632)	0.0349 B (0.0000632)	---	---	---	---
PCB-005 (2,3-DiCB)	0.00019 J (0.0000092)	0.000128 B (0.0000421)	0.000161 B (0.0000421)	---	---	---	---
PCB-006 (2,3'-DiCB)	0.0065 (0.0000087)	0.00488 B (0.0000421)	0.00535 B (0.0000421)	---	---	---	---
PCB-007 (2,4-DiCB)	0.00033 (0.0000089)	0.00025 B (0.0000421)	0.000277 B (0.0000421)	---	---	---	---
PCB-008 (2,4'-DiCB)	0.015 B (0.0000085)	0.0113 B (0.0000632)	0.0125 B (0.0000632)	---	---	---	---
PCB-009 (2,5-DiCB)	0.00063 (0.000009)	0.000473 B (0.0000421)	0.000539 B (0.0000421)	---	---	---	---
PCB-010 (2,6-DiCB)	0.0011 (0.0000096)	0.000706 (0.0000421)	0.000754 (0.0000421)	---	---	---	---
PCB-011 (3,3'-DiCB)	UB (0.0000085)	0.0000559 B (0.0000632)	0.0000754 B (0.0000632)	---	---	---	---
PCB-012 (3,4-DiCB)	0.00054 (0.0000087)	0.000416 BC (0.0000632)	0.000469 BC (0.0000632)	---	---	---	---
PCB-013 (3,4'-DiCB)	0.00054 (0.0000087)	0.000416 BC12 (0.0000632)	0.000469 BC12 (0.0000632)	---	---	---	---
PCB-014 (3,5-DiCB)	0.0000066 EMPC J (0.0000075)	0.00000521 B (0.0000421)	0.00000609 B (0.0000421)	---	---	---	---
PCB-015 (4,4'-DiCB)	0.0029 B (0.0000088)	0.00236 (0.0000421)	0.00265 (0.0000421)	---	---	---	---
PCB-170 (2,2',3,3',4,4',5-HpCB)	0.000063 EMPC J (0.0000052)	0.000294 (0.0000421)	0.000322 (0.0000421)	---	---	---	---
PCB-171 (2,2',3,3',4,4',6-HpCB)	0.000028 J (0.0000047)	0.0000924 C (0.0000421)	0.000113 C (0.0000421)	---	---	---	---
PCB-172 (2,2',3,3',4,5,5'-HpCB)	U (0.0000047)	0.0000421 EMPC (0.0000421)	0.0000534 EMPC (0.0000421)	---	---	---	---
PCB-173 (2,2',3,3',4,5,6-HpCB)	0.000028 J (0.0000047)	0.0000924 C171 (0.0000421)	0.000113 C171 (0.0000421)	---	---	---	---
PCB-174 (2,2',3,3',4,5,6'-HpCB)	0.000076 BJ (0.0000044)	0.000368 (0.0000421)	0.00041 (0.0000421)	---	---	---	---
PCB-175 (2,2',3,3',4,5',6-HpCB)	U (0.0000042)	0.00000925 EMPC J (0.0000421)	0.0000149 EMPC J (0.0000421)	---	---	---	---
PCB-177 (2,2',3,3',4,5',6'-HpCB)	0.000031 EMPC J (0.0000045)	0.00019 (0.0000421)	0.000208 (0.0000421)	---	---	---	---
PCB-176 (2,2',3,3',4,6,6'-HpCB)	0.000012 EMPC J (0.0000032)	0.0000427 (0.0000421)	0.0000529 (0.0000421)	---	---	---	---
PCB-178 (2,2',3,3',5,5',6-HpCB)	0.000022 J (0.0000045)	0.0000647 EMPC (0.0000421)	0.0000883 (0.0000421)	---	---	---	---
PCB-179 (2,2',3,3',5,6,6'-HpCB)	0.000042 J (0.0000034)	0.000179 (0.0000421)	0.000196 (0.0000421)	---	---	---	---
PCB-180 (2,2',3,4,4',5,5'-HpCB)	0.00014 BJ (0.0000036)	0.00078 C (0.0000421)	0.000794 C (0.0000421)	---	---	---	---
PCB-181 (2,2',3,4,4',5,6-HpCB)	U (0.0000042)	U (0.0000421)	U (0.0000421)	---	---	---	---
PCB-182 (2,2',3,4,4',5,6'-HpCB)	U (0.0000041)	U (0.0000421)	U (0.0000421)	---	---	---	---
PCB-183 (2,2',3,4,4',5',6-HpCB)	0.000052 J (0.0000042)	0.000246 C (0.0000421)	0.000292 C (0.0000421)	---	---	---	---
PCB-185 (2,2',3,4,5,5',6-HpCB)	0.000052 J (0.0000042)	0.000246 C183 (0.0000421)	0.000292 C183 (0.0000421)	---	---	---	---
PCB-187 (2,2',3,4',5,5',6-HpCB)	0.00013 J (0.0000039)	0.000603 (0.0000421)	0.000597 (0.0000421)	---	---	---	---
PCB-188 (2,2',3,4',5,6,6'-HpCB)	U (0.0000029)	U (0.0000421)	U (0.0000421)	---	---	---	---
PCB-189 (2,3,3',4,4',5,5'-HpCB)	U (0.0000037)	0.00000745 EMPC J (0.0000421)	0.0000131 J (0.0000421)	---	---	---	---
PCB-190 (2,3,3',4,4',5,6-HpCB)	0.0000094 EMPC J (0.0000033)	0.0000586 (0.0000421)	0.0000602 (0.0000421)	---	---	---	---
PCB-191 (2,3,3',4,4',5',6-HpCB)	U (0.0000032)	0.0000114 EMPC J (0.0000421)	0.0000126 EMPC J (0.0000421)	---	---	---	---
PCB-193 (2,3,3',4',5,5',6-HpCB)	0.00014 BJ (0.0000036)	0.00078 C180 (0.0000421)	0.000794 C180 (0.0000421)	---	---	---	---
PCB-128 (2,2',3,3',4,4'-HxCB)	0.000034 JQ (0.0000048)	0.0000981 C (0.0000421)	0.000113 C (0.0000421)	---	---	---	---
PCB-129 (2,2',3,3',4,5-HxCB)	0.00032 B (0.0000049)	0.000948 C (0.0000421)	0.000954 C (0.0000421)	---	---	---	---
PCB-130 (2,2',3,3',4,5'-HxCB)	0.0000098 EMPC J (0.0000064)	0.0000388 J (0.0000421)	0.0000403 EMPC J (0.0000421)	---	---	---	---
PCB-131 (2,2',3,3',4,6-HxCB)	U (0.0000065)	0.00000574 EMPC J (0.0000421)	0.0000137 EMPC J (0.0000421)	---	---	---	---
PCB-132 (2,2',3,3',4,6'-HxCB)	0.00013 J (0.0000062)	---	---	---	---	---	---
PCB-133 (2,2',3,3',5,5'-HxCB)	U (0.000006)	---	---	---	---	---	---
PCB-134 (2,2',3,3',5,6-HxCB)	0.000027 J (0.0000064)	0.0000458 EMPC (0.0000421)	0.0000602 EMPC (0.0000421)	---	---	---	---
PCB-135 (2,2',3,3',5,6'-HxCB)	0.00017 J (0.0000064)	0.000493 C (0.0000421)	0.000527 C (0.0000421)	---	---	---	---
PCB-136 (2,2',3,3',6,6'-HxCB)	0.000071 J (0.0000047)	0.000193 (0.0000421)	0.000214 (0.0000421)	---	---	---	---
PCB-137 (2,2',3,4,4',5-HxCB)	U (0.0000055)	0.0000209 J (0.0000421)	0.000025 J (0.0000421)	---	---	---	---
PCB-138 (2,2',3,4,4',5'-HxCB)	0.00032 B (0.0000049)	---	---	---	---	---	---
PCB-139 (2,2',3,4,4',6-HxCB)	U (0.0000055)	0.00000888 J (0.0000421)	0.00000915 EMPC J (0.0000421)	---	---	---	---
PCB-140 (2,2',3,4,4',6'-HxCB)	U (0.0000055)	0.00000888 J (0.0000421)	0.00000915 EMPC J (0.0000421)	---	---	---	---
PCB-141 (2,2',3,4,5,5'-HxCB)	0.000066 J (0.0000057)	0.000222 (0.0000421)	0.000238 (0.0000421)	---	---	---	---
PCB-143 (2,2',3,4,5,6'-HxCB)	0.000027 J (0.0000064)	0.0000458 EMPC (0.0000421)	0.0000602 EMPC (0.0000421)	---	---	---	---
PCB-144 (2,2',3,4,5',6-HxCB)	0.000017 EMPC J (0.0000059)	0.0000521 (0.0000421)	0.0000748 (0.0000421)	---	---	---	---
PCB-146 (2,2',3,4',5,5'-HxCB)	0.000048 J (0.0000052)	0.000137 (0.0000421)	0.000159 (0.0000421)	---	---	---	---
PCB-147 (2,2',3,4',5,6-HxCB)	0.00033 B (0.0000053)	0.000936 C (0.0000421)	0.00102 C (0.0000421)	---	---	---	---
PCB-148 (2,2',3,4',5,6'-HxCB)	U (0.0000063)	U (0.0000421)	U (0.0000421)	---	---	---	---
PCB-149 (2,2',3,4',5',6-HxCB)	0.00033 B (0.0000053)	0.000936 C147 (0.0000421)	0.00102 C147 (0.0000421)	---	---	---	---
PCB-150 (2,2',3,4',6,6'-HxCB)	U (0.0000044)	U (0.0000421)	U (0.0000421)	---	---	---	---
PCB-151 (2,2',3,5,5',6-HxCB)	0.00017 J (0.0000064)	0.000493 C135 (0.0000421)	0.000527 C135 (0.0000421)	---	---	---	---
PCB-152 (2,2',3,5,6,6'-HxCB)	U (0.0000045)	U (0.0000421)	U (0.0000421)	---	---	---	---
PCB-153 (2,2',4,4',5,5'-HxCB)	0.00024 B (0.0000043)	0.000888 C (0.0000421)	0.000892 C (0.0000421)	---	---	---	---

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04
ENVIRON Sample ID	DUP-20110727	MB-MW-04-20111027	DUP-20111027	MB-MW-04-20120425	DUP-20120425	MB-MW-04-20121018	DUP-20121018
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	7/27/2011	10/27/2011	10/27/2011	4/25/2012	4/25/2012	10/18/2012	10/18/2012
Comments	Field Duplicate		Field Duplicate		Field Duplicate		Field Duplicate
PCB-154 (2,2',4,4',5,6'-HxCB)	U (0.0000052)	0.00000978 J (0.0000421)	0.0000176 EMPC J (0.0000421)	---	---	---	---
PCB-155 (2,2',4,4',6,6'-HxCB)	U (0.0000042)	U (0.0000421)	U (0.0000421)	---	---	---	---
PCB-156 (2,3,3',4,4',5-HxCB)	0.000019 JQ (0.0000049)	0.000059 C (0.0000421)	0.0000747 C (0.0000421)	---	---	---	---
PCB-157 (2,3,3',4,4',5'-HxCB)	0.000019 EMPC J (0.0000049)	0.000059 C156 (0.0000421)	0.0000747 C156 (0.0000421)	---	---	---	---
PCB-158 (2,3,3',4,4',6-HxCB)	0.000027 J (0.0000039)	0.0000778 (0.0000421)	0.0000915 (0.0000421)	---	---	---	---
PCB-159 (2,3,3',4,5,5'-HxCB)	U (0.0000042)	0.00000866 J (0.0000421)	0.000012 EMPC J (0.0000421)	---	---	---	---
PCB-160 (2,3,3',4,5,6-HxCB)	0.00032 B (0.0000049)	0.000948 C129 (0.0000421)	0.000954 C129 (0.0000421)	---	---	---	---
PCB-162 (2,3,3',4',5,5'-HxCB)	U (0.0000041)	U (0.0000421)	U (0.0000421)	---	---	---	---
PCB-163 (2,3,3',4',5,6-HxCB)	0.00032 B (0.0000049)	0.000948 C129 (0.0000421)	0.000954 C129 (0.0000421)	---	---	---	---
PCB-164 (2,3,3',4',5',6-HxCB)	0.000023 EMPC J (0.0000043)	0.0000605 (0.0000421)	0.0000748 (0.0000421)	---	---	---	---
PCB-166 (2,3,4,4',5,6-HxCB)	0.000034 EMPC J (0.0000048)	0.0000981 C128 (0.0000421)	0.000113 C128 (0.0000421)	---	---	---	---
PCB-167 (2,3',4,4',5,5'-HxCB)	0.0000087 EMPC J (0.0000032)	0.0000183 J (0.0000421)	0.0000295 J (0.0000421)	---	---	---	---
PCB-168 (2,3',4,4',5',6-HxCB)	0.00024 B (0.0000043)	0.000888 C153 (0.0000421)	0.000892 C153 (0.0000421)	---	---	---	---
PCB-169 (3,3',4,4',5,5'-HxCB)	U (0.0000035)	U (0.0000421)	U (0.0000421)	---	---	---	---
PCB-206 (2,2',3,3',4,4',5,5',6-NoCB)	0.00038 (0.000005)	0.00219 (0.0000421)	0.00184 (0.0000421)	---	---	---	---
PCB-207 (2,2',3,3',4,4',5,6,6'-NoCB)	0.000027 J (0.0000036)	0.000164 (0.0000421)	0.000169 (0.0000421)	---	---	---	---
PCB-208 (2,2',3,3',4,5,5',6,6'-NoCB)	0.00015 J (0.0000038)	0.000788 (0.0000421)	0.000679 (0.0000421)	---	---	---	---
PCB-194 (2,2',3,3',4,4',5,5'-OcCB)	0.000063 JQ (0.0000034)	0.000385 (0.0000421)	0.00042 (0.0000421)	---	---	---	---
PCB-195 (2,2',3,3',4,4',5,6-OcCB)	0.0000082 J (0.0000037)	0.0000704 (0.0000421)	0.0000767 EMPC (0.0000421)	---	---	---	---
PCB-196 (2,2',3,3',4,4',5,6'-OcCB)	0.00003 EMPC J (0.0000048)	---	---	---	---	---	---
PCB-197 (2,2',3,3',4,4',6,6'-OcCB)	U (0.0000036)	0.00000638 EMPC J (0.0000421)	0.0000125 J (0.0000421)	---	---	---	---
PCB-198 (2,2',3,3',4,5,5',6-OcCB)	0.00022 (0.000005)	0.00097 C (0.0000421)	0.00117 C (0.0000421)	---	---	---	---
PCB-199 (2,2',3,3',4,5,5',6'-OcCB)	0.00022 (0.000005)	0.0000618 (0.0000421)	0.0000688 (0.0000421)	---	---	---	---
PCB-200 (2,2',3,3',4,5,6,6'-OcCB)	0.000014 EMPC J (0.0000035)	0.000084 (0.0000421)	0.0000965 (0.0000421)	---	---	---	---
PCB-201 (2,2',3,3',4,5',6,6'-OcCB)	0.000019 J (0.0000034)	0.00097 C198 (0.0000421)	0.00117 C198 (0.0000421)	---	---	---	---
PCB-202 (2,2',3,3',5,5',6,6'-OcCB)	0.000076 J (0.0000038)	0.00037 (0.0000421)	0.000369 (0.0000421)	---	---	---	---
PCB-203 (2,2',3,4,4',5,5',6-OcCB)	0.00016 EMPC J (0.0000044)	0.000858 (0.0000421)	0.000909 (0.0000421)	---	---	---	---
PCB-204 (2,2',3,4,4',5,6,6'-OcCB)	U (0.0000037)	U (0.0000421)	U (0.0000421)	---	---	---	---
PCB-205 (2,3,3',4,4',5,5',6-OcCB)	U (0.0000029)	0.00000424 EMPC J (0.0000421)	0.0000125 EMPC J (0.0000421)	---	---	---	---
PCB-24/27	---	0.000121 (0.0000421)	0.00014 (0.0000421)	---	---	---	---
PCB-42/59	---	0.00045 (0.0000421)	0.000516 (0.0000421)	---	---	---	---
PCB-52/69	---	0.0031 B (0.0000421)	0.00336 B (0.0000421)	---	---	---	---
PCB-61/70	---	0.00124 BC (0.0000421)	0.00133 BC (0.0000421)	---	---	---	---
PCB-90/101	---	0.000956 C (0.0000421)	0.000975 C (0.0000421)	---	---	---	---
PCB-107/109	---	0.0000396 J (0.0000421)	0.0000537 J (0.0000421)	---	---	---	---
PCB-132/161	---	0.00034 (0.0000421)	0.00034 (0.0000421)	---	---	---	---
PCB-133/142	---	0.0000121 EMPC J (0.0000421)	0.000015 EMPC J (0.0000421)	---	---	---	---
PCB-138/163/164	---	0.000948 C129 (0.0000421)	0.000954 C129 (0.0000421)	---	---	---	---
PCB-196/203	---	0.000184 (0.0000421)	0.000198 (0.0000421)	---	---	---	---
PCB-082 (2,2',3,3',4-PeCB)	0.000038 EMPC J (0.0000063)	0.0000791 (0.0000421)	0.0000972 EMPC (0.0000421)	---	---	---	---
PCB-083 (2,2',3,3',5-PeCB)	0.00022 (0.0000053)	0.000418 C (0.0000421)	0.000451 C (0.0000421)	---	---	---	---
PCB-084 (2,2',3,3',6-PeCB)	0.00023 (0.0000061)	0.000303 J (0.0000421)	0.000374 J (0.0000421)	---	---	---	---
PCB-085 (2,2',3,4,4'-PeCB)	0.000052 EMPC J (0.0000044)	0.0000885 EMPC (0.0000421)	0.00012 C (0.0000421)	---	---	---	---
PCB-086 (2,2',3,4,5-PeCB)	0.00028 EMPC (0.0000045)	0.000472 C (0.0000421)	0.000533 EMPC (0.0000421)	---	---	---	---
PCB-087 (2,2',3,4,5'-PeCB)	0.00028 Q (0.0000045)	0.000472 C86 (0.0000421)	0.000533 EMPC (0.0000421)	---	---	---	---
PCB-088 (2,2',3,4,6-PeCB)	0.000079 EMPC J (0.0000054)	0.000144 C (0.0000421)	0.000171 C (0.0000421)	---	---	---	---
PCB-089 (2,2',3,4,6'-PeCB)	U (0.0000059)	U (0.0000421)	0.0000151 J (0.0000421)	---	---	---	---
PCB-090 (2,2',3,4',5-PeCB)	0.00053 B (0.0000046)	---	---	---	---	---	---
PCB-097 (2,2',3,4',5'-PeCB)	0.00028 EMPC (0.0000045)	0.000472 C86 (0.0000421)	0.000533 EMPC (0.0000421)	---	---	---	---
PCB-091 (2,2',3,4',6-PeCB)	0.000079 JQ (0.0000054)	0.000144 C88 (0.0000421)	0.000171 C88 (0.0000421)	---	---	---	---
PCB-098 (2,2',3,4',6'-PeCB)	0.000028 EMPC J (0.000005)	0.0000322 EMPC J (0.0000421)	0.000051 EMPC (0.0000421)	---	---	---	---
PCB-092 (2,2',3,5,5'-PeCB)	0.00012 J (0.0000052)	0.000178 (0.0000421)	0.000198 (0.0000421)	---	---	---	---
PCB-093 (2,2',3,5,6-PeCB)	U (0.0000052)	0.0000226 EMPC J (0.0000421)	0.0000307 EMPC J (0.0000421)	---	---	---	---
PCB-094 (2,2',3,5,6'-PeCB)	0.000013 EMPC J (0.0000059)	U (0.0000421)	0.0000229 J (0.0000421)	---	---	---	---
PCB-095 (2,2',3,5',6-PeCB)	0.00073 (0.0000055)	0.00116 (0.0000421)	0.00121 (0.0000421)	---	---	---	---
PCB-096 (2,2',3,6,6'-PeCB)	0.000014 EMPC J (0.0000044)	0.0000146 EMPC J (0.0000421)	0.0000259 J (0.0000421)	---	---	---	---
PCB-099 (2,2',4,4',5-PeCB)	0.00022 (0.0000053)	0.000418 C83 (0.0000421)	0.000451 C83 (0.0000421)	---	---	---	---
PCB-100 (2,2',4,4',6-PeCB)	U (0.0000052)	0.0000226 EMPC J (0.0000421)	0.0000307 EMPC J (0.0000421)	---	---	---	---
PCB-101 (2,2',4,5,5'-PeCB)	0.00053 B (0.0000046)	0.000956 C90 (0.0000421)	0.000975 C90 (0.0000421)	---	---	---	---
PCB-102 (2,2',4,5,6'-PeCB)	0.000028 JQ (0.000005)	0.0000322 EMPC J (0.0000421)	0.000051 EMPC (0.0000421)	---	---	---	---

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04
ENVIRON Sample ID	DUP-20110727	MB-MW-04-20111027	DUP-20111027	MB-MW-04-20120425	DUP-20120425	MB-MW-04-20121018	DUP-20121018
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	7/27/2011	10/27/2011	10/27/2011	4/25/2012	4/25/2012	10/18/2012	10/18/2012
Comments	Field Duplicate		Field Duplicate		Field Duplicate		Field Duplicate
PCB-103 (2,2',4,5',6-PeCB)	U (0.0000051)	0.0000119 EMPC J (0.0000421)	0.0000149 EMPC J (0.0000421)	---	---	---	---
PCB-104 (2,2',4,6,6'-PeCB)	U (0.0000039)	U (0.0000421)	U (0.0000421)	---	---	---	---
PCB-105 (2,3,3',4,4'-PeCB)	0.000067 J (0.000004)	0.000166 (0.0000421)	0.000189 (0.0000421)	---	---	---	---
PCB-108 (2,3,3',4,5'-PeCB)	0.0000059 EMPC J (0.0000041)	0.0000169 J (0.0000421)	0.0000193 EMPC J (0.0000421)	---	---	---	---
PCB-109 (2,3,3',4,6-PeCB)	0.00028 EMPC (0.0000045)	0.000472 C86 (0.0000421)	0.000533 EMPC (0.0000421)	---	---	---	---
PCB-107 (2,3,3',4',5-PeCB)	0.000013 EMPC J (0.0000039)	---	---	---	---	---	---
PCB-110 (2,3,3',4',6-PeCB)	0.00051 B (0.0000039)	0.000903 BC (0.0000421)	0.000964 BC (0.0000421)	---	---	---	---
PCB-111 (2,3,3',5,5'-PeCB)	U (0.0000037)	U (0.0000421)	U (0.0000421)	---	---	---	---
PCB-113 (2,3,3',5',6-PeCB)	0.00053 B (0.0000046)	0.000956 C90 (0.0000421)	0.000975 C90 (0.0000421)	---	---	---	---
PCB-114 (2,3,4,4',5-PeCB)	0.0000075 J (0.0000037)	---	---	---	---	---	---
PCB-115 (2,3,4,4',6-PeCB)	0.00051 B (0.0000039)	0.000903 BC110 (0.0000421)	0.000964 BC110 (0.0000421)	---	---	---	---
PCB-116 (2,3,4,5,6-PeCB)	0.000052 JQ (0.0000044)	0.0000885 EMPC (0.0000421)	0.00012 C85 (0.0000421)	---	---	---	---
PCB-117 (2,3,4',5,6-PeCB)	0.000052 EMPC J (0.0000044)	0.0000885 EMPC (0.0000421)	0.00012 C85 (0.0000421)	---	---	---	---
PCB-118 (2,3',4,4',5-PeCB)	0.00023 B (0.0000039)	0.000487 EMPC (0.0000421)	0.000506 EMPC (0.0000421)	---	---	---	---
PCB-119 (2,3',4,4',6-PeCB)	0.00028 EMPC (0.0000045)	0.000472 C86 (0.0000421)	0.000533 EMPC (0.0000421)	---	---	---	---
PCB-120 (2,3',4,5,5'-PeCB)	U (0.0000038)	U (0.0000421)	U (0.0000421)	---	---	---	---
PCB-121 (2,3',4,5',6-PeCB)	U (0.0000038)	U (0.0000421)	U (0.0000421)	---	---	---	---
PCB-122 (2,3,3',4',5'-PeCB)	U (0.0000044)	0.00000502 EMPC J (0.0000421)	0.0000108 EMPC J (0.0000421)	---	---	---	---
PCB-123 (2,3',4,4',5'-PeCB)	U (0.0000042)	0.00000749 EMPC J (0.0000421)	0.000012 J (0.0000421)	---	---	---	---
PCB-124 (2,3',4',5,5'-PeCB)	0.0000059 EMPC J (0.0000041)	0.0000169 J (0.0000421)	0.0000193 EMPC J (0.0000421)	---	---	---	---
PCB-125 (2,3',4',5',6-PeCB)	0.00028 EMPC (0.0000045)	0.000472 C86 (0.0000421)	0.000533 EMPC (0.0000421)	---	---	---	---
PCB-126 (3,3',4,4',5-PeCB)	U (0.0000037)	U (0.0000421)	U (0.0000421)	---	---	---	---
PCB-127 (3,3',4,5,5'-PeCB)	U (0.000004)	U (0.0000421)	U (0.0000421)	---	---	---	---
PCB-040 (2,2',3,3'-TeCB)	0.00074 (0.0000057)	0.000953 C (0.0000421)	0.00107 C (0.0000421)	---	---	---	---
PCB-041 (2,2',3,4-TeCB)	0.00074 (0.0000057)	0.000953 C40 (0.0000421)	0.00107 C40 (0.0000421)	---	---	---	---
PCB-042 (2,2',3,4'-TeCB)	0.00035 EMPC (0.0000058)	---	---	---	---	---	---
PCB-043 (2,2',3,5-TeCB)	0.000068 J (0.0000053)	0.000062 EMPC (0.0000421)	0.000091 C (0.0000421)	---	---	---	---
PCB-044 (2,2',3,5'-TeCB)	0.0018 B (0.0000051)	0.0022 BC (0.0000421)	0.00241 BC (0.0000421)	---	---	---	---
PCB-045 (2,2',3,6-TeCB)	0.00096 (0.0000059)	0.00114 BC (0.0000421)	0.00124 BC (0.0000421)	---	---	---	---
PCB-046 (2,2',3,6'-TeCB)	0.00045 (0.000007)	0.0005 (0.0000421)	0.000577 (0.0000421)	---	---	---	---
PCB-047 (2,2',4,4'-TeCB)	0.0018 B (0.0000051)	0.0022 BC44 (0.0000421)	0.00241 BC44 (0.0000421)	---	---	---	---
PCB-048 (2,2',4,5-TeCB)	0.00023 (0.0000056)	0.000261 (0.0000421)	0.000309 (0.0000421)	---	---	---	---
PCB-049 (2,2',4,5'-TeCB)	0.0014 B (0.0000047)	0.00164 BC (0.0000421)	0.00178 BC (0.0000421)	---	---	---	---
PCB-050 (2,2',4,6-TeCB)	0.0016 (0.0000055)	0.00161 C (0.0000421)	0.00177 C (0.0000421)	---	---	---	---
PCB-051 (2,2',4,6'-TeCB)	0.00096 (0.0000059)	0.00114 BC45 (0.0000421)	0.00124 BC45 (0.0000421)	---	---	---	---
PCB-052 (2,2',5,5'-TeCB)	0.0026 B (0.0000055)	---	---	---	---	---	---
PCB-053 (2,2',5,6'-TeCB)	0.0016 (0.0000055)	0.00161 C50 (0.0000421)	0.00177 C50 (0.0000421)	---	---	---	---
PCB-054 (2,2',6,6'-TeCB)	0.00025 (0.0000071)	0.000195 J (0.0000421)	0.00024 J (0.0000421)	---	---	---	---
PCB-055 (2,3,3',4-TeCB)	0.000019 EMPC J (0.0000044)	0.0000102 EMPC J (0.0000421)	0.0000193 J (0.0000421)	---	---	---	---
PCB-056 (2,3,3',4'-TeCB)	0.0002 B (0.0000041)	0.000306 (0.0000421)	0.00036 (0.0000421)	---	---	---	---
PCB-057 (2,3,3',5-TeCB)	U (0.0000042)	0.00000825 J (0.0000421)	0.000013 EMPC J (0.0000421)	---	---	---	---
PCB-058 (2,3,3',5'-TeCB)	U (0.0000042)	0.00000294 EMPC J (0.0000421)	0.00000541 EMPC J (0.0000421)	---	---	---	---
PCB-059 (2,3,3',6-TeCB)	0.00013 J (0.000004)	0.000168 C (0.0000421)	0.000203 C (0.0000421)	---	---	---	---
PCB-060 (2,3,4,4'-TeCB)	0.00009 J (0.0000043)	0.000123 (0.0000421)	0.000156 (0.0000421)	---	---	---	---
PCB-061 (2,3,4,5-TeCB)	0.00087 B (0.000004)	---	---	---	---	---	---
PCB-062 (2,3,4,6-TeCB)	0.00013 J (0.000004)	0.000168 C59 (0.0000421)	0.000203 C59 (0.0000421)	---	---	---	---
PCB-063 (2,3,4',5-TeCB)	0.000028 EMPC J (0.0000039)	0.0000366 J (0.0000421)	0.0000503 (0.0000421)	---	---	---	---
PCB-064 (2,3,4',6-TeCB)	0.00036 B (0.0000038)	0.000508 (0.0000421)	0.000564 (0.0000421)	---	---	---	---
PCB-065 (2,3,5,6-TeCB)	0.0018 B (0.0000051)	0.0022 BC44 (0.0000421)	0.00241 BC44 (0.0000421)	---	---	---	---
PCB-066 (2,3',4,4'-TeCB)	0.00043 B (0.000004)	0.000662 (0.0000421)	0.000725 (0.0000421)	---	---	---	---
PCB-067 (2,3',4,5-TeCB)	0.000018 J (0.0000038)	0.0000229 J (0.0000421)	0.0000351 J (0.0000421)	---	---	---	---
PCB-068 (2,3',4,5'-TeCB)	0.000015 J (0.0000038)	0.0000171 J (0.0000421)	0.0000192 EMPC J (0.0000421)	---	---	---	---
PCB-069 (2,3',4,6-TeCB)	0.0014 B (0.0000047)	0.00164 BC49 (0.0000421)	0.00178 BC49 (0.0000421)	---	---	---	---
PCB-070 (2,3',4',5-TeCB)	0.00087 B (0.000004)	0.00124 BC61 (0.0000421)	0.00133 BC61 (0.0000421)	---	---	---	---
PCB-076 (2,3',4',5'-TeCB)	0.00087 B (0.000004)	0.00124 BC61 (0.0000421)	0.00133 BC61 (0.0000421)	---	---	---	---
PCB-071 (2,3',4',6-TeCB)	0.00074 (0.0000057)	0.000953 C40 (0.0000421)	0.00107 C40 (0.0000421)	---	---	---	---
PCB-072 (2,3',5,5'-TeCB)	0.000014 J (0.0000041)	0.0000156 J (0.0000421)	0.000023 J (0.0000421)	---	---	---	---
PCB-073 (2,3',5',6-TeCB)	0.000068 J (0.0000053)	0.000062 EMPC (0.0000421)	0.000091 C43 (0.0000421)	---	---	---	---
PCB-074 (2,4,4',5-TeCB)	0.00087 B (0.000004)	0.00124 BC61 (0.0000421)	0.00133 BC61 (0.0000421)	---	---	---	---
PCB-075 (2,4,4',6-TeCB)	0.00013 J (0.000004)	0.000168 C59 (0.0000421)	0.000203 C59 (0.0000421)	---	---	---	---
PCB-077 (3,3',4,4'-TeCB)	0.000014 EMPC J (0.000004)	0.0000389 J (0.0000421)	0.0000449 EMPC (0.0000421)	---	---	---	---

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04
ENVIRON Sample ID	DUP-20110727	MB-MW-04-20111027	DUP-20111027	MB-MW-04-20120425	DUP-20120425	MB-MW-04-20121018	DUP-20121018
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	7/27/2011	10/27/2011	10/27/2011	4/25/2012	4/25/2012	10/18/2012	10/18/2012
Comments	Field Duplicate		Field Duplicate		Field Duplicate		Field Duplicate
PCB-078 (3,3',4,5-TeCB)	U (0.0000043)	U (0.0000421)	U (0.0000421)	---	---	---	---
PCB-079 (3,3',4,5'-TeCB)	U (0.0000038)	0.00000467 J (0.0000421)	0.00000799 EMPC J (0.0000421)	---	---	---	---
PCB-081 (3,4,4',5-TeCB)	U (0.0000039)	U (0.0000421)	U (0.0000421)	---	---	---	---
PCB-016 (2,2',3-TrCB)	0.0037 (0.0000095)	0.00355 (0.0000421)	0.00382 (0.0000421)	---	---	---	---
PCB-017 (2,2',4-TrCB)	0.0049 (0.000008)	0.00457 (0.0000421)	0.00496 (0.0000421)	---	---	---	---
PCB-018 (2,2',5-TrCB)	0.0095 B (0.000007)	0.00951 BC (0.0000632)	0.0102 BC (0.0000632)	---	---	---	---
PCB-019 (2,2',6-TrCB)	0.0047 (0.0000098)	0.00482 (0.0000421)	0.00519 (0.0000421)	---	---	---	---
PCB-020 (2,3,3'-TrCB)	0.0032 B (0.0000044)	0.00425 BC (0.0000421)	0.00464 BC (0.0000421)	---	---	---	---
PCB-021 (2,3,4-TrCB)	0.0014 B (0.0000044)	0.00182 BC (0.0000421)	0.00202 BC (0.0000421)	---	---	---	---
PCB-022 (2,3,4'-TrCB)	0.00092 B (0.0000045)	0.00127 B (0.0000421)	0.00137 B (0.0000421)	---	---	---	---
PCB-023 (2,3,5-TrCB)	0.0000076 EMPC J (0.0000045)	0.00000405 EMPC J (0.0000421)	U (0.0000421)	---	---	---	---
PCB-024 (2,3,6-TrCB)	0.00012 EMPC J (0.0000067)	---	---	---	---	---	---
PCB-025 (2,3',4-TrCB)	0.00065 (0.000004)	0.000769 (0.0000421)	0.000799 (0.0000421)	---	---	---	---
PCB-026 (2,3',5-TrCB)	0.0012 B (0.0000043)	0.00142 C (0.0000421)	0.00149 C (0.0000421)	---	---	---	---
PCB-027 (2,3',6-TrCB)	0.0049 (0.0000058)	0.00468 (0.0000421)	0.0049 (0.0000421)	---	---	---	---
PCB-028 (2,4,4'-TrCB)	0.0032 B (0.0000044)	0.00425 BC20 (0.0000421)	0.00464 BC20 (0.0000421)	---	---	---	---
PCB-030 (2,4,6-TrCB)	0.0095 B (0.000007)	0.00951 BC18 (0.0000632)	0.0102 BC18 (0.0000632)	---	---	---	---
PCB-029 (2,4,5-TrCB)	0.0012 B (0.0000043)	0.00142 C26 (0.0000421)	0.00149 C26 (0.0000421)	---	---	---	---
PCB-031 (2,4',5-TrCB)	0.0031 B (0.0000043)	0.00408 B (0.0000421)	0.00425 B (0.0000421)	---	---	---	---
PCB-032 (2,4',6-TrCB)	0.0028 (0.0000056)	0.003 (0.0000421)	0.00323 (0.0000421)	---	---	---	---
PCB-033 (2,3',4'-TrCB)	0.0014 B (0.0000044)	0.00182 BC21 (0.0000421)	0.00202 BC21 (0.0000421)	---	---	---	---
PCB-034 (2,3',5'-TrCB)	0.000032 J (0.0000045)	0.0000312 J (0.0000421)	0.0000374 EMPC J (0.0000421)	---	---	---	---
PCB-035 (3,3',4-TrCB)	U (0.0000046)	0.0000182 EMPC J (0.0000421)	0.0000216 EMPC J (0.0000421)	---	---	---	---
PCB-036 (3,3',5-TrCB)	U (0.0000044)	U (0.0000421)	U (0.0000421)	---	---	---	---
PCB-037 (3,4,4'-TrCB)	0.00031 (0.0000046)	0.00047 EMPC (0.0000421)	0.000563 (0.0000421)	---	---	---	---
PCB-038 (3,4,5-TrCB)	U (0.0000047)	U (0.0000421)	0.00000514 EMPC J (0.0000421)	---	---	---	---
PCB-039 (3,4',5-TrCB)	U (0.0000042)	0.0000104 EMPC J (0.0000421)	0.0000136 J (0.0000421)	---	---	---	---
PCB Aroclors							
PCBs (total)	---	U (0.51)	U (0.51)	U (0.01)	U (0.01)	0.028 (0.011)	0.025 (0.01)
Aroclor-1016	---	U (0.51)	U (0.51)	U (0.01)	U (0.01)	U (0.011)	U (0.01)
Aroclor-1242	---	U (0.51)	U (0.51)	U (0.01)	U (0.01)	U (0.011)	U (0.01)
Aroclor-1248	---	U (0.51)	U (0.51)	U (0.01)	U (0.01)	0.028 (0.011)	0.025 (0.01)
Aroclor-1260	---	U (0.51)	U (0.51)	U (0.01)	U (0.01)	U (0.011)	U (0.01)
Aroclor-1268	---	U (0.51)	U (0.51)	U (0.01)	U (0.01)	U (0.011)	U (0.01)
CDDF							
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	U (0.00000044)	---	---	---	---	---	---
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	0.00000077 EMPC J (0.00000041)	---	---	---	---	---	---
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	U (0.00000062)	---	---	---	---	---	---
Octachlorodibenzo-p-dioxin	UB (0.00000073)	---	---	---	---	---	---
2,3,7,8-Tetrachlorodibenzo-p-dioxin	0.00000031 JQ (0.00000026)	---	---	---	---	---	---
1,2,3,7,8-Pentachlorodibenzofuran	U (0.00000028)	---	---	---	---	---	---
1,2,3,4,7,8-Hexachlorodibenzofuran	U (0.00000033)	---	---	---	---	---	---
1,2,3,4,6,7,8-Heptachlorodibenzofuran	UB (0.00000037)	---	---	---	---	---	---
Octachlorodibenzofuran	0.0000012 BJQ (0.00000039)	---	---	---	---	---	---

Notes:
1 All concentrations are presented in ug/L (ppb).
2 Only compounds with at least one detection are shown.

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-05	MB-MW-05	MB-MW-05
ENVIRON Sample ID	MB-MW-04-20130410	DUP-20130410	MB-MW-04-20131009	DUP-20131009	MB-MW-05-20100728	MB-MW-05-20101019	MB-MW-05-20110113
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	4/10/2013	4/10/2013	10/9/2013	10/9/2013	7/28/2010	10/19/2010	1/13/2011
Comments		Field Duplicate		Field Duplicate			
SVOC							
Acenaphthene	U (2)	2.8 J (2)	1.3 J (1.9)	3.5 (1.9)	112 (0.15)	---	24.6 (0.158)
Acenaphthylene	UJ (2)	U (2)	U (1.9)	U (1.9)	8.46 (0.158)	---	1.46 J (0.167)
Acetophenone	U (10)	U (10)	U (9.6)	U (9.6)	U (0.832)	---	U (0.88)
Anthracene	0.36 J (2)	0.4 J (2)	0.35 J (1.9)	0.53 J (1.9)	11 (0.16)	---	3.27 (0.169)
Benzaldehyde	U (10)	U (10)	U (9.6)	U (9.6)	U (1.56)	---	U (1.65)
Benzo(a)anthracene	U (2)	U (2)	U (1.9)	U (1.9)	U (0.153)	---	4.41 (0.162)
Benzo(a)pyrene	U (2)	U (2)	U (1.9)	U (1.9)	U (0.139)	---	3.12 (0.147)
Benzo(b)fluoranthene	U (2)	U (2)	U (1.9)	U (1.9)	U (0.163)	---	3.86 (0.173)
Benzo(g,h,i)perylene	U (2)	U (2)	U (1.9)	U (1.9)	U (0.157)	---	4.2 (0.166)
Benzo(k)fluoranthene	U (2)	U (2)	U (1.9)	U (1.9)	U (0.569)	---	3.62 (0.602)
Biphenyl	U (10)	U (10)	U (9.6)	U (9.6)	24.6 (0.432)	---	4.59 J (0.456)
bis(2-Chloroethyl) ether	U (2)	U (2)	U (1.9)	U (1.9)	U (0.261)	---	U (0.276)
bis(2-Ethylhexyl)phthalate	U (20)	U (20)	U (19)	U (19)	U (13)	---	U (13.8)
Butylbenzylphthalate	U (10)	U (10)	U (9.6)	U (9.6)	U (1.48)	---	1.76 J (1.57)
Caprolactam	U (51)	U (51)	U (48)	U (48)	43 J (12.4)	---	U (13.1)
Carbazole	U (2)	U (2)	U (1.9)	U (1.9)	93.9 (0.164)	---	14 (0.174)
4-Chloroaniline	U (10)	U (10)	U (9.6)	U (9.6)	U (0.92)	---	U (0.974)
2-Chlorophenol	U (10)	U (10)	U (9.6)	U (9.6)	U (1.72)	---	U (1.82)
4-Chlorophenyl-phenyl ether	U (10)	U (10)	U (9.6)	U (9.6)	U (0.523)	---	U (0.553)
Chrysene	U (2)	U (2)	U (1.9)	U (1.9)	U (0.146)	---	4.25 (0.154)
Dibenz(a,h)anthracene	U (2)	U (2)	U (1.9)	U (1.9)	U (0.161)	---	4.36 (0.17)
Dibenzofuran	U (10)	U (10)	U (9.6)	U (9.6)	77.7 (0.642)	---	15.6 (0.679)
2,4-Dichlorophenol	U (2)	U (2)	U (1.9)	U (1.9)	U (0.347)	---	U (0.367)
Diethylphthalate	U (10)	U (10)	U (9.6)	U (9.6)	U (1.52)	---	U (1.61)
2,4-Dimethylphenol	U (10)	U (10)	U (9.6)	U (9.6)	226 (0.886)	---	20 (0.937)
Dimethylphthalate	U (10)	U (10)	U (9.6)	U (9.6)	U (0.796)	---	U (0.842)
Di-n-butylphthalate	U (10)	U (10)	U (9.6)	U (9.6)	U (1.3)	---	U (1.37)
Di-n-octylphthalate	U (10)	U (10)	U (9.6)	U (9.6)	U (2.15)	---	2.41 J (2.27)
Fluoranthene	U (2)	U (2)	U (1.9)	U (1.9)	9.75 (0.168)	---	4.14 (0.178)
Fluorene	U (2)	1.3 J (2)	0.56 J (1.9)	1.8 J (1.9)	84.1 (0.225)	---	18.9 (0.238)
Indeno(1,2,3-cd)pyrene	U (2)	U (2)	U (1.9)	U (1.9)	U (0.207)	---	3.07 (0.219)
Isophorone	U (10)	U (10)	U (9.6)	U (9.6)	U (0.67)	---	U (0.708)
2-Methylnaphthalene	U (2)	U (2)	U (1.9)	U (1.9)	162 (0.127)	---	26.5 (0.134)
2-Methylphenol	U (10)	U (10)	U (9.6)	U (9.6)	10.5 (0.896)	---	1.11 J (0.948)
3&4-Methylphenol	U (10)	U (10)	U (9.6)	U (9.6)	---	---	---
4-Methylphenol	---	---	---	---	33.6 (0.938)	---	U (0.992)
Naphthalene	U (2)	U (2)	U (1.9)	U (1.9)	1070 (0.728)	---	187 (0.154)
N-Nitrosodiphenylamine	U (10)	U (10)	U (9.6)	U (9.6)	U (0.887)	---	U (0.938)
Pentachlorophenol	U (10)	U (10)	U (9.6)	U (9.6)	U (0.69)	---	U (0.729)
Phenanthrene	U (2)	U (2)	U (1.9)	U (1.9)	92.6 (0.444)	---	23.5 (0.47)
Phenol	U (2)	U (2)	U (1.9)	U (1.9)	4.34 (0.604)	---	U (0.639)
Pyrene	U (2)	U (2)	U (1.9)	U (1.9)	4.91 (0.163)	---	3.38 (0.173)
PCB Congeners							
13C12-PCB 114	---	---	---	---	---	---	---
PCB-001 (2-CB)	---	---	---	---	0.00919 (0.00000671)	0.00989 B (0.00000183)	0.0145 B (0.00000242)
PCB-002 (3-CB)	---	---	---	---	0.000471 (0.00000655)	0.0000868 (0.00000126)	0.000602 (0.0000023)
PCB-003 (4-CB)	---	---	---	---	0.00195 (0.00000639)	0.0000569 B (0.000000978)	0.00279 (0.0000022)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-05	MB-MW-05	MB-MW-05
ENVIRON Sample ID	MB-MW-04-20130410	DUP-20130410	MB-MW-04-20131009	DUP-20131009	MB-MW-05-20100728	MB-MW-05-20101019	MB-MW-05-20110113
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	4/10/2013	4/10/2013	10/9/2013	10/9/2013	7/28/2010	10/19/2010	1/13/2011
Comments		Field Duplicate		Field Duplicate			
PCB-209 (DeCB)	---	---	---	---	0.000483 (0.0000091)	0.0000649 (0.00000232)	0.000141 J (0.00000506)
PCB-004 (2,2'-DiCB)	---	---	---	---	0.00871 B (0.0000356)	0.0126 B (0.0000123)	0.0127 (0.0000122)
PCB-005 (2,3-DiCB)	---	---	---	---	0.0000488 JQ (0.0000262)	0.0000453 EMPC (0.00000565)	0.0000392 EMPC J (0.00000976)
PCB-006 (2,3'-DiCB)	---	---	---	---	UB (0.0000246)	0.00248 B (0.00000531)	0.00335 (0.00000918)
PCB-007 (2,4-DiCB)	---	---	---	---	0.000112 JQ (0.0000253)	0.0000847 EMPC (0.00000546)	0.000156 EMPC J (0.00000943)
PCB-008 (2,4'-DiCB)	---	---	---	---	0.00453 B (0.0000241)	0.00455 B (0.0000052)	0.00544 B (0.00000898)
PCB-009 (2,5-DiCB)	---	---	---	---	0.000192 JQ (0.0000254)	0.000224 B (0.00000549)	0.000258 (0.00000948)
PCB-010 (2,6-DiCB)	---	---	---	---	0.000112 JQ (0.0000273)	0.000251 (0.0000059)	0.000312 EMPC (0.0000102)
PCB-011 (3,3'-DiCB)	---	---	---	---	UB (0.0000242)	UB (0.00000523)	0.000131 EMPC J (0.00000903)
PCB-012 (3,4-DiCB)	---	---	---	---	0.000301 JQ (0.0000248)	0.000234 (0.00000536)	0.000377 EMPC (0.00000925)
PCB-013 (3,4'-DiCB)	---	---	---	---	0.000301 JQ (0.0000248)	0.000234 (0.00000536)	0.000377 EMPC (0.00000925)
PCB-014 (3,5-DiCB)	---	---	---	---	U (0.0000214)	U (0.00000462)	U (0.00000798)
PCB-015 (4,4'-DiCB)	---	---	---	---	0.000925 (0.0000246)	0.000888 B (0.00000421)	0.00112 B (0.00000974)
PCB-170 (2,2',3,3',4,4',5-HpCB)	---	---	---	---	0.000176 J (0.0000125)	0.0000329 EMPC J (0.00000246)	0.0000781 J (0.00000603)
PCB-171 (2,2',3,3',4,4',6-HpCB)	---	---	---	---	0.0000525 J (0.0000108)	0.0000097 EMPC J (0.00000237)	0.0000228 J (0.00000586)
PCB-172 (2,2',3,3',4,5,5'-HpCB)	---	---	---	---	U (0.0000107)	0.00000439 J (0.00000234)	0.0000165 J (0.0000058)
PCB-173 (2,2',3,3',4,5,6-HpCB)	---	---	---	---	0.0000525 J (0.0000108)	0.0000097 EMPC J (0.00000237)	0.0000228 J (0.00000586)
PCB-174 (2,2',3,3',4,5,6'-HpCB)	---	---	---	---	0.000192 J (0.00000999)	0.0000409 EMPC (0.00000219)	0.0000854 EMPC J (0.00000543)
PCB-175 (2,2',3,3',4,5',6-HpCB)	---	---	---	---	U (0.00000959)	U (0.00000211)	U (0.00000522)
PCB-177 (2,2',3,3',4,5',6'-HpCB)	---	---	---	---	0.0000794 JQ (0.0000102)	0.0000268 J (0.00000225)	0.0000402 EMPC J (0.00000556)
PCB-176 (2,2',3,3',4,6,6'-HpCB)	---	---	---	---	0.0000212 JQ (0.00000731)	U (0.00000161)	0.0000127 J (0.00000397)
PCB-178 (2,2',3,3',5,5',6-HpCB)	---	---	---	---	0.0000417 JQ (0.0000104)	0.0000096 EMPC J (0.00000228)	0.0000182 J (0.00000564)
PCB-179 (2,2',3,3',5,6,6'-HpCB)	---	---	---	---	0.000113 J (0.00000771)	0.0000227 J (0.00000169)	0.0000456 J (0.00000419)
PCB-180 (2,2',3,4,4',5,5'-HpCB)	---	---	---	---	0.000451 (0.00000815)	0.000104 (0.00000179)	0.000229 (0.00000443)
PCB-181 (2,2',3,4,4',5,6-HpCB)	---	---	---	---	U (0.00000959)	U (0.00000211)	U (0.00000521)
PCB-182 (2,2',3,4,4',5,6'-HpCB)	---	---	---	---	U (0.00000932)	U (0.00000205)	U (0.00000507)
PCB-183 (2,2',3,4,4',5',6-HpCB)	---	---	---	---	0.000166 J (0.00000952)	0.0000299 J (0.00000209)	0.0000627 J (0.00000518)
PCB-185 (2,2',3,4,5,5',6-HpCB)	---	---	---	---	0.000468 (0.00000891)	0.0000969 (0.00000196)	0.000175 J (0.00000485)
PCB-187 (2,2',3,4',5,5',6-HpCB)	---	---	---	---	U (0.00000642)	U (0.0000015)	U (0.00000374)
PCB-188 (2,2',3,4',5,6,6'-HpCB)	---	---	---	---	U (0.00000652)	U (0.000000779)	U (0.00000396)
PCB-189 (2,3,3',4,4',5,5'-HpCB)	---	---	---	---	0.0000224 J (0.00000743)	0.00000547 EMPC J (0.00000163)	0.0000182 J (0.00000404)
PCB-190 (2,3,3',4,4',5,6-HpCB)	---	---	---	---	U (0.0000073)	U (0.0000016)	U (0.00000397)
PCB-191 (2,3,3',4,4',5',6-HpCB)	---	---	---	---	0.000451 (0.00000815)	0.000104 (0.00000179)	0.000229 (0.00000443)
PCB-193 (2,3,3',4',5,5',6-HpCB)	---	---	---	---	0.0000836 JQ (0.0000106)	0.0000249 J (0.00000161)	0.0000433 JQ (0.00000522)
PCB-128 (2,2',3,3',4,4'-HxCB)	---	---	---	---	0.000652 B (0.000011)	0.000185 B (0.00000166)	0.000332 B (0.0000054)
PCB-129 (2,2',3,3',4,5-HxCB)	---	---	---	---	0.000024 JQ (0.0000141)	0.00000992 J (0.00000215)	0.000013 EMPC J (0.00000697)
PCB-130 (2,2',3,3',4,5'-HxCB)	---	---	---	---	U (0.0000145)	U (0.0000022)	U (0.00000714)
PCB-131 (2,2',3,3',4,6-HxCB)	---	---	---	---	0.000216 J (0.0000138)	0.0000654 (0.0000021)	0.000114 J (0.00000679)
PCB-132 (2,2',3,3',4,6'-HxCB)	---	---	---	---	U (0.0000133)	U (0.00000202)	U (0.00000655)
PCB-133 (2,2',3,3',5,5'-HxCB)	---	---	---	---	0.0000302 JQ (0.0000142)	0.0000103 J (0.00000215)	0.0000211 J (0.00000697)
PCB-134 (2,2',3,3',5,6-HxCB)	---	---	---	---	0.000255 J (0.0000129)	0.0000587 (0.00000337)	0.000131 EMPC J (0.00000676)
PCB-135 (2,2',3,3',5,6'-HxCB)	---	---	---	---	0.0000733 JQ (0.00000949)	0.0000226 J (0.00000247)	0.0000554 J (0.00000496)
PCB-136 (2,2',3,3',6,6'-HxCB)	---	---	---	---	0.0000215 JQ (0.0000122)	0.00000676 J (0.00000185)	0.00000891 J (0.00000601)
PCB-137 (2,2',3,4,4',5-HxCB)	---	---	---	---	0.000652 B (0.000011)	0.000185 B (0.00000166)	0.000332 B (0.0000054)
PCB-138 (2,2',3,4,4',5'-HxCB)	---	---	---	---	U (0.0000121)	U (0.00000184)	U (0.00000598)
PCB-139 (2,2',3,4,4',6-HxCB)	---	---	---	---	U (0.0000121)	U (0.00000184)	U (0.00000598)
PCB-140 (2,2',3,4,4',6'-HxCB)	---	---	---	---	0.000124 JQ (0.0000126)	0.000033 J (0.00000192)	0.0000592 JQ (0.00000622)
PCB-141 (2,2',3,4,5,5'-HxCB)	---	---	---	---	0.0000302 JQ (0.0000142)	0.0000103 J (0.00000215)	0.0000211 J (0.00000697)
PCB-143 (2,2',3,4,5,6'-HxCB)	---	---	---	---	0.000032 JQ (0.000012)	U (0.00000313)	U (0.00000627)
PCB-144 (2,2',3,4,5',6-HxCB)	---	---	---	---	0.0000887 J (0.0000115)	0.0000236 J (0.00000175)	0.0000454 J (0.00000568)
PCB-146 (2,2',3,4',5,5'-HxCB)	---	---	---	---	0.000541 B (0.0000118)	0.000162 B (0.00000179)	0.000307 (0.0000058)
PCB-147 (2,2',3,4',5,6-HxCB)	---	---	---	---	U (0.0000127)	U (0.00000331)	U (0.00000663)
PCB-148 (2,2',3,4',5,6'-HxCB)	---	---	---	---	0.000541 B (0.0000118)	0.000162 B (0.00000179)	0.000307 (0.0000058)
PCB-149 (2,2',3,4',5',6-HxCB)	---	---	---	---	U (0.00000884)	U (0.00000231)	U (0.00000462)
PCB-150 (2,2',3,4',6,6'-HxCB)	---	---	---	---	0.000255 J (0.0000129)	0.0000587 (0.00000337)	0.000131 EMPC J (0.00000676)
PCB-151 (2,2',3,5,5',6-HxCB)	---	---	---	---	U (0.00000902)	U (0.00000235)	U (0.00000471)
PCB-152 (2,2',3,5,6,6'-HxCB)	---	---	---	---	0.000553 B (0.00000947)	0.000144 B (0.00000144)	0.000268 (0.00000466)
PCB-153 (2,2',4,4',5,5'-HxCB)	---	---	---	---			

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-05	MB-MW-05	MB-MW-05
ENVIRON Sample ID	MB-MW-04-20130410	DUP-20130410	MB-MW-04-20131009	DUP-20131009	MB-MW-05-20100728	MB-MW-05-20101019	MB-MW-05-20110113
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	4/10/2013	4/10/2013	10/9/2013	10/9/2013	7/28/2010	10/19/2010	1/13/2011
Comments		Field Duplicate		Field Duplicate			
PCB-154 (2,2',4,4',5,6'-HxCB)	---	---	---	---	0.00000763 J (0.0000105)	0.00000203 EMPC J (0.00000274)	U (0.00000549)
PCB-155 (2,2',4,4',6,6'-HxCB)	---	---	---	---	U (0.0000086)	U (0.00000224)	U (0.00000449)
PCB-156 (2,3,3',4,4',5-HxCB)	---	---	---	---	0.0000588 J (0.0000113)	0.0000144 JQ (0.00000171)	0.0000265 JQ (0.00000571)
PCB-157 (2,3,3',4,4',5'-HxCB)	---	---	---	---	0.0000588 J (0.0000113)	0.0000144 EMPC J (0.00000171)	0.0000265 EMPC J (0.00000571)
PCB-158 (2,3,3',4,4',6-HxCB)	---	---	---	---	0.0000526 JQ (0.00000864)	0.000015 J (0.00000131)	0.0000288 J (0.00000426)
PCB-159 (2,3,3',4,5,5'-HxCB)	---	---	---	---	U (0.00000927)	U (0.00000141)	U (0.00000457)
PCB-160 (2,3,3',4,5,6-HxCB)	---	---	---	---	0.000652 B (0.000011)	0.000185 B (0.00000166)	0.000332 B (0.0000054)
PCB-162 (2,3,3',4',5,5'-HxCB)	---	---	---	---	U (0.00000915)	U (0.00000139)	U (0.00000451)
PCB-163 (2,3,3',4',5,6-HxCB)	---	---	---	---	0.000652 B (0.000011)	0.000185 B (0.00000166)	0.000332 B (0.0000054)
PCB-164 (2,3,3',4',5',6-HxCB)	---	---	---	---	0.0000371 J (0.00000965)	0.00000974 J (0.00000147)	0.0000163 J (0.00000475)
PCB-166 (2,3,4,4',5,6-HxCB)	---	---	---	---	0.0000836 JQ (0.0000106)	0.0000249 J (0.00000161)	0.0000433 EMPC J (0.00000522)
PCB-167 (2,3',4,4',5,5'-HxCB)	---	---	---	---	0.0000175 JQ (0.00000709)	0.0000037 EMPC J (0.00000104)	0.00000978 J (0.00000335)
PCB-168 (2,3',4,4',5',6-HxCB)	---	---	---	---	0.000553 B (0.00000947)	0.000144 B (0.00000144)	0.000268 (0.00000466)
PCB-169 (3,3',4,4',5,5'-HxCB)	---	---	---	---	U (0.00000721)	U (0.00000114)	U (0.00000357)
PCB-206 (2,2',3,3',4,4',5,5',6-NoCB)	---	---	---	---	0.00198 (0.0000134)	0.000265 (0.00000226)	0.000526 (0.00000528)
PCB-207 (2,2',3,3',4,4',5,6,6'-NoCB)	---	---	---	---	0.000157 J (0.00000963)	0.0000209 EMPC J (0.00000144)	0.0000403 EMPC J (0.00000383)
PCB-208 (2,2',3,3',4,5,5',6,6'-NoCB)	---	---	---	---	0.000768 (0.0000101)	0.000103 (0.00000139)	0.000188 J (0.00000405)
PCB-194 (2,2',3,3',4,4',5,5'-OcCB)	---	---	---	---	0.000326 J (0.00000806)	0.000051 Q (0.00000152)	0.0000969 J (0.00000364)
PCB-195 (2,2',3,3',4,4',5,6-OcCB)	---	---	---	---	0.0000346 JQ (0.00000875)	0.0000103 J (0.00000165)	U (0.00000395)
PCB-196 (2,2',3,3',4,4',5,6'-OcCB)	---	---	---	---	0.00016 JQ (0.0000103)	0.0000199 J (0.00000268)	0.0000568 J (0.0000049)
PCB-197 (2,2',3,3',4,4',6,6'-OcCB)	---	---	---	---	U (0.00000768)	U (0.00000199)	U (0.00000365)
PCB-198 (2,2',3,3',4,5,5',6-OcCB)	---	---	---	---	0.00124 (0.0000107)	0.000174 (0.00000276)	0.000344 (0.00000506)
PCB-199 (2,2',3,3',4,5,5',6'-OcCB)	---	---	---	---	0.00124 (0.0000107)	0.000174 (0.00000276)	0.000344 (0.00000506)
PCB-200 (2,2',3,3',4,5,6,6'-OcCB)	---	---	---	---	0.0000467 JQ (0.00000754)	0.00000725 EMPC J (0.00000196)	0.00000863 EMPC J (0.00000358)
PCB-201 (2,2',3,3',4,5',6,6'-OcCB)	---	---	---	---	0.0000813 J (0.00000728)	0.000012 J (0.00000189)	0.000025 EMPC J (0.00000346)
PCB-202 (2,2',3,3',5,5',6,6'-OcCB)	---	---	---	---	0.000352 J (0.0000082)	0.0000478 (0.00000213)	0.0001 J (0.00000389)
PCB-203 (2,2',3,4,4',5,5',6-OcCB)	---	---	---	---	0.000863 (0.00000952)	0.000109 (0.00000247)	0.000234 (0.00000452)
PCB-204 (2,2',3,4,4',5,6,6'-OcCB)	---	---	---	---	U (0.00000799)	U (0.00000207)	U (0.00000379)
PCB-205 (2,3,3',4,4',5,5',6-OcCB)	---	---	---	---	U (0.00000679)	U (0.00000128)	U (0.00000307)
PCB-24/27	---	---	---	---	---	---	---
PCB-42/59	---	---	---	---	---	---	---
PCB-52/69	---	---	---	---	---	---	---
PCB-61/70	---	---	---	---	---	---	---
PCB-90/101	---	---	---	---	---	---	---
PCB-107/109	---	---	---	---	---	---	---
PCB-132/161	---	---	---	---	---	---	---
PCB-133/142	---	---	---	---	---	---	---
PCB-138/163/164	---	---	---	---	---	---	---
PCB-196/203	---	---	---	---	---	---	---
PCB-082 (2,2',3,3',4-PeCB)	---	---	---	---	0.000103 J (0.0000129)	0.0000468 (0.00000347)	0.0000695 J (0.00000772)
PCB-083 (2,2',3,3',5-PeCB)	---	---	---	---	0.00037 J (0.0000108)	0.000151 (0.00000291)	0.000293 (0.00000649)
PCB-084 (2,2',3,3',6-PeCB)	---	---	---	---	0.000211 JQ (0.0000123)	0.000117 (0.00000331)	0.000162 J (0.00000738)
PCB-085 (2,2',3,4,4'-PeCB)	---	---	---	---	0.000143 J (0.00000892)	0.0000514 (0.0000024)	0.0000644 EMPC J (0.00000534)
PCB-086 (2,2',3,4,5-PeCB)	---	---	---	---	0.000492 BQ (0.00000913)	0.000184 (0.00000246)	0.000368 (0.00000547)
PCB-087 (2,2',3,4,5'-PeCB)	---	---	---	---	0.000492 BQ (0.00000913)	0.000184 (0.00000246)	0.000368 (0.00000547)
PCB-088 (2,2',3,4,6-PeCB)	---	---	---	---	0.000114 JQ (0.000011)	0.000042 EMPC (0.00000295)	0.0000725 J (0.00000658)
PCB-089 (2,2',3,4,6'-PeCB)	---	---	---	---	U (0.0000119)	0.0000105 J (0.00000321)	U (0.00000714)
PCB-090 (2,2',3,4',5-PeCB)	---	---	---	---	0.000715 B (0.00000929)	0.0003 B (0.0000025)	0.000538 B (0.00000556)
PCB-097 (2,2',3,4',5'-PeCB)	---	---	---	---	0.000492 BQ (0.00000913)	0.000184 (0.00000246)	0.000368 (0.00000547)
PCB-091 (2,2',3,4',6-PeCB)	---	---	---	---	0.000114 JQ (0.000011)	0.000042 Q (0.00000295)	0.0000725 J (0.00000658)
PCB-098 (2,2',3,4',6'-PeCB)	---	---	---	---	0.0000349 J (0.0000103)	0.0000122 J (0.00000276)	U (0.00000615)
PCB-092 (2,2',3,5,5'-PeCB)	---	---	---	---	0.000126 J (0.0000105)	0.0000467 (0.00000284)	0.0000879 J (0.00000632)
PCB-093 (2,2',3,5,6-PeCB)	---	---	---	---	0.0000115 J (0.0000106)	U (0.00000285)	0.0000226 EMPC J (0.00000634)
PCB-094 (2,2',3,5,6'-PeCB)	---	---	---	---	U (0.0000119)	U (0.00000321)	U (0.00000714)
PCB-095 (2,2',3,5',6-PeCB)	---	---	---	---	0.00063 (0.0000112)	0.000337 (0.00000302)	0.00061 (0.00000672)
PCB-096 (2,2',3,6,6'-PeCB)	---	---	---	---	U (0.00000892)	U (0.0000024)	U (0.00000534)
PCB-099 (2,2',4,4',5-PeCB)	---	---	---	---	0.00037 J (0.0000108)	0.000151 (0.00000291)	0.000293 (0.00000649)
PCB-100 (2,2',4,4',6-PeCB)	---	---	---	---	0.0000115 J (0.0000106)	U (0.00000285)	0.0000226 EMPC J (0.00000634)
PCB-101 (2,2',4,5,5'-PeCB)	---	---	---	---	0.000715 B (0.00000929)	0.0003 B (0.0000025)	0.000538 B (0.00000556)
PCB-102 (2,2',4,5,6'-PeCB)	---	---	---	---	0.0000349 J (0.0000103)	0.0000122 J (0.00000276)	U (0.00000615)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-05	MB-MW-05	MB-MW-05
ENVIRON Sample ID	MB-MW-04-20130410	DUP-20130410	MB-MW-04-20131009	DUP-20131009	MB-MW-05-20100728	MB-MW-05-20101019	MB-MW-05-20110113
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	4/10/2013	4/10/2013	10/9/2013	10/9/2013	7/28/2010	10/19/2010	1/13/2011
Comments		Field Duplicate		Field Duplicate			
PCB-103 (2,2',4,5',6-PeCB)	---	---	---	---	U (0.0000105)	U (0.00000281)	U (0.00000626)
PCB-104 (2,2',4,6,6'-PeCB)	---	---	---	---	U (0.00000794)	U (0.00000214)	U (0.00000476)
PCB-105 (2,3,3',4,4'-PeCB)	---	---	---	---	0.000245 J (0.00000714)	0.000069 (0.000000816)	0.000114 EMPC J (0.00000413)
PCB-108 (2,3,3',4,5'-PeCB)	---	---	---	---	0.0000217 JQ (0.00000783)	0.00000634 J (0.000000882)	0.00000981 EMPC J (0.00000426)
PCB-109 (2,3,3',4,6-PeCB)	---	---	---	---	0.000492 BQ (0.00000913)	0.000184 (0.00000246)	0.000368 (0.00000547)
PCB-107 (2,3,3',4',5-PeCB)	---	---	---	---	0.0000345 J (0.00000745)	0.0000108 J (0.000000839)	0.0000161 EMPC J (0.00000405)
PCB-110 (2,3,3',4',6-PeCB)	---	---	---	---	0.000836 B (0.00000788)	0.000379 B (0.00000212)	0.00066 B (0.00000472)
PCB-111 (2,3,3',5,5'-PeCB)	---	---	---	---	U (0.00000747)	U (0.00000201)	U (0.00000447)
PCB-113 (2,3,3',5',6-PeCB)	---	---	---	---	0.000715 B (0.00000929)	0.0003 B (0.0000025)	0.000538 B (0.00000556)
PCB-114 (2,3,4,4',5-PeCB)	---	---	---	---	0.0000138 JQ (0.00000727)	0.0000042 J (0.000000807)	0.00000664 EMPC J (0.0000037)
PCB-115 (2,3,4,4',6-PeCB)	---	---	---	---	0.000836 B (0.00000788)	0.000379 B (0.00000212)	0.00066 B (0.00000472)
PCB-116 (2,3,4,5,6-PeCB)	---	---	---	---	0.000143 J (0.00000892)	0.0000514 (0.0000024)	0.0000644 JQ (0.00000534)
PCB-117 (2,3,4',5,6-PeCB)	---	---	---	---	0.000143 J (0.00000892)	0.0000514 (0.0000024)	0.0000644 EMPC J (0.00000534)
PCB-118 (2,3',4,4',5-PeCB)	---	---	---	---	0.000557 B (0.00000741)	0.000177 B (0.000000807)	0.000333 B (0.00000377)
PCB-119 (2,3',4,4',6-PeCB)	---	---	---	---	0.000492 BQ (0.00000913)	0.000184 (0.00000246)	0.000368 (0.00000547)
PCB-120 (2,3',4,5,5'-PeCB)	---	---	---	---	U (0.00000768)	U (0.00000207)	U (0.0000046)
PCB-121 (2,3',4,5',6-PeCB)	---	---	---	---	U (0.00000774)	U (0.00000208)	U (0.00000464)
PCB-122 (2,3,3',4',5'-PeCB)	---	---	---	---	U (0.00000836)	0.00000286 JQ (0.000000942)	U (0.00000454)
PCB-123 (2,3',4,4',5'-PeCB)	---	---	---	---	0.0000113 JQ (0.00000758)	0.0000019 EMPC J (0.000000884)	0.00000446 EMPC J (0.00000416)
PCB-124 (2,3',4',5,5'-PeCB)	---	---	---	---	0.0000217 JQ (0.00000783)	0.00000634 J (0.000000882)	0.00000981 EMPC J (0.00000426)
PCB-125 (2,3',4',5',6-PeCB)	---	---	---	---	0.000492 BQ (0.00000913)	0.000184 (0.00000246)	0.000368 (0.00000547)
PCB-126 (3,3',4,4',5-PeCB)	---	---	---	---	U (0.00000744)	U (0.000000837)	U (0.00000431)
PCB-127 (3,3',4,5,5'-PeCB)	---	---	---	---	U (0.00000759)	U (0.000000855)	U (0.00000412)
PCB-040 (2,2',3,3'-TeCB)	---	---	---	---	0.000778 (0.0000113)	0.000531 (0.000002)	0.000755 (0.00000702)
PCB-041 (2,2',3,4-TeCB)	---	---	---	---	0.000778 (0.0000113)	0.000531 (0.000002)	0.000755 (0.00000702)
PCB-042 (2,2',3,4'-TeCB)	---	---	---	---	0.000356 J (0.0000115)	0.00022 (0.00000204)	0.00034 (0.00000715)
PCB-043 (2,2',3,5-TeCB)	---	---	---	---	0.000058 J (0.0000106)	0.0000279 J (0.00000187)	0.000047 J (0.00000656)
PCB-044 (2,2',3,5'-TeCB)	---	---	---	---	0.00148 B (0.0000101)	0.000878 B (0.00000179)	0.00128 B (0.00000628)
PCB-045 (2,2',3,6-TeCB)	---	---	---	---	0.000377 BJ (0.0000117)	0.000284 B (0.00000207)	0.000449 (0.00000728)
PCB-046 (2,2',3,6'-TeCB)	---	---	---	---	0.000133 J (0.0000139)	0.000105 (0.00000245)	0.000175 J (0.00000861)
PCB-047 (2,2',4,4'-TeCB)	---	---	---	---	0.00148 B (0.0000101)	0.000878 B (0.00000179)	0.00128 B (0.00000628)
PCB-048 (2,2',4,5-TeCB)	---	---	---	---	0.000268 J (0.0000112)	0.000162 (0.00000199)	0.000262 (0.00000697)
PCB-049 (2,2',4,5'-TeCB)	---	---	---	---	0.000871 (0.00000932)	0.000456 B (0.00000165)	0.000716 (0.00000579)
PCB-050 (2,2',4,6-TeCB)	---	---	---	---	0.000322 J (0.0000109)	0.000222 (0.00000193)	0.000358 (0.00000676)
PCB-051 (2,2',4,6'-TeCB)	---	---	---	---	0.000377 BJ (0.0000117)	0.000284 B (0.00000207)	0.000449 (0.00000728)
PCB-052 (2,2',5,5'-TeCB)	---	---	---	---	0.00154 B (0.0000109)	0.000978 B (0.00000193)	0.00145 B (0.00000677)
PCB-053 (2,2',5,6'-TeCB)	---	---	---	---	0.000322 J (0.0000109)	0.000222 (0.00000193)	0.000358 (0.00000676)
PCB-054 (2,2',6,6'-TeCB)	---	---	---	---	U (0.0000179)	U (0.00000295)	U (0.0000114)
PCB-055 (2,3,3',4-TeCB)	---	---	---	---	0.0000168 JQ (0.00000876)	0.0000104 EMPC J (0.00000155)	0.0000293 EMPC J (0.00000544)
PCB-056 (2,3,3',4'-TeCB)	---	---	---	---	0.000384 J (0.00000824)	0.000234 B (0.00000146)	0.000327 (0.00000512)
PCB-057 (2,3,3',5-TeCB)	---	---	---	---	U (0.00000834)	0.00000354 J (0.00000148)	U (0.00000518)
PCB-058 (2,3,3',5'-TeCB)	---	---	---	---	U (0.0000083)	U (0.00000147)	U (0.00000516)
PCB-059 (2,3,3',6-TeCB)	---	---	---	---	0.000107 J (0.00000805)	0.0000819 B (0.00000142)	0.000119 J (0.000005)
PCB-060 (2,3,4,4'-TeCB)	---	---	---	---	0.000196 J (0.00000849)	0.000124 (0.0000015)	0.000186 J (0.00000527)
PCB-061 (2,3,4,5-TeCB)	---	---	---	---	0.00152 B (0.00000805)	0.000802 B (0.00000142)	0.00118 B (0.000005)
PCB-062 (2,3,4,6-TeCB)	---	---	---	---	0.000107 J (0.00000805)	0.0000819 B (0.00000142)	0.000119 J (0.000005)
PCB-063 (2,3,4',5-TeCB)	---	---	---	---	0.0000364 J (0.00000774)	0.0000156 J (0.00000137)	0.0000222 J (0.0000048)
PCB-064 (2,3,4',6-TeCB)	---	---	---	---	0.000525 B (0.00000763)	0.000315 (0.00000135)	0.000477 (0.00000474)
PCB-065 (2,3,5,6-TeCB)	---	---	---	---	0.00148 B (0.0000101)	0.000878 B (0.00000179)	0.00128 B (0.00000628)
PCB-066 (2,3',4,4'-TeCB)	---	---	---	---	0.00079 (0.00000799)	0.000425 B (0.00000141)	0.000616 B (0.00000496)
PCB-067 (2,3',4,5-TeCB)	---	---	---	---	0.0000243 J (0.0000075)	0.0000141 J (0.00000133)	0.000024 J (0.00000466)
PCB-068 (2,3',4,5'-TeCB)	---	---	---	---	UB (0.00000756)	UB (0.00000134)	UB (0.00000469)
PCB-069 (2,3',4,6-TeCB)	---	---	---	---	0.000871 (0.00000932)	0.000456 B (0.00000165)	0.000716 (0.00000579)
PCB-070 (2,3',4',5-TeCB)	---	---	---	---	0.00152 B (0.00000805)	0.000802 B (0.00000142)	0.00118 B (0.000005)
PCB-076 (2,3',4',5'-TeCB)	---	---	---	---	0.00152 B (0.00000805)	0.000802 B (0.00000142)	0.00118 B (0.000005)
PCB-071 (2,3',4',6-TeCB)	---	---	---	---	0.000778 (0.0000113)	0.000531 (0.000002)	0.000755 (0.00000702)
PCB-072 (2,3',5,5'-TeCB)	---	---	---	---	U (0.00000812)	0.00000364 EMPC J (0.00000144)	0.00000611 EMPC J (0.00000504)
PCB-073 (2,3',5',6-TeCB)	---	---	---	---	0.000058 J (0.0000106)	0.0000279 J (0.00000187)	0.000047 J (0.00000656)
PCB-074 (2,4,4',5-TeCB)	---	---	---	---	0.00152 B (0.00000805)	0.000802 B (0.00000142)	0.00118 B (0.000005)
PCB-075 (2,4,4',6-TeCB)	---	---	---	---	0.000107 J (0.00000805)	0.0000819 B (0.00000142)	0.000119 J (0.000005)
PCB-077 (3,3',4,4'-TeCB)	---	---	---	---	0.0000525 J (0.0000076)	0.0000292 J (0.00000142)	0.0000401 J (0.00000484)

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-04	MB-MW-05	MB-MW-05	MB-MW-05
ENVIRON Sample ID	MB-MW-04-20130410	DUP-20130410	MB-MW-04-20131009	DUP-20131009	MB-MW-05-20100728	MB-MW-05-20101019	MB-MW-05-20110113
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	4/10/2013	4/10/2013	10/9/2013	10/9/2013	7/28/2010	10/19/2010	1/13/2011
Comments		Field Duplicate		Field Duplicate			
PCB-078 (3,3',4,5-TeCB)	---	---	---	---	U (0.00000862)	U (0.00000153)	U (0.00000535)
PCB-079 (3,3',4,5'-TeCB)	---	---	---	---	U (0.00000757)	0.00000225 EMPC J (0.00000134)	U (0.0000047)
PCB-081 (3,4,4',5-TeCB)	---	---	---	---	U (0.00000805)	U (0.00000134)	U (0.00000487)
PCB-016 (2,2',3-TrCB)	---	---	---	---	0.00117 (0.0000147)	0.00132 (0.00000582)	0.00152 (0.00000932)
PCB-017 (2,2',4-TrCB)	---	---	---	---	0.00133 S (0.0000122)	0.00142 (0.00000486)	0.00168 (0.00000777)
PCB-018 (2,2',5-TrCB)	---	---	---	---	0.00293 (0.0000108)	0.00321 B (0.0000043)	0.00369 B (0.00000688)
PCB-019 (2,2',6-TrCB)	---	---	---	---	0.000743 (0.000015)	0.00119 (0.00000595)	0.00148 (0.00000952)
PCB-020 (2,3,3'-TrCB)	---	---	---	---	0.00163 B (0.00000801)	0.00187 B (0.000000884)	0.0028 B (0.00000487)
PCB-021 (2,3,4-TrCB)	---	---	---	---	0.000835 B (0.00000803)	0.000564 B (0.000000886)	0.000694 B (0.00000488)
PCB-022 (2,3,4'-TrCB)	---	---	---	---	0.000543 (0.00000816)	0.000672 B (0.000000901)	0.000835 B (0.00000496)
PCB-023 (2,3,5-TrCB)	---	---	---	---	U (0.00000832)	U (0.000000918)	U (0.00000506)
PCB-024 (2,3,6-TrCB)	---	---	---	---	0.0000265 J (0.0000102)	0.0000644 (0.00000407)	0.0000785 J (0.00000651)
PCB-025 (2,3',4-TrCB)	---	---	---	---	0.000347 J (0.00000742)	0.000194 (0.000000819)	0.000319 (0.00000451)
PCB-026 (2,3',5-TrCB)	---	---	---	---	0.000538 (0.00000788)	0.000422 B (0.000000869)	0.000646 (0.00000479)
PCB-027 (2,3',6-TrCB)	---	---	---	---	0.000369 J (0.00000883)	0.000414 (0.00000351)	0.000447 J (0.00000562)
PCB-028 (2,4,4'-TrCB)	---	---	---	---	0.00163 B (0.00000801)	0.00187 B (0.000000884)	0.0028 B (0.00000487)
PCB-030 (2,4,6-TrCB)	---	---	---	---	0.00293 (0.0000108)	0.00321 B (0.0000043)	0.00369 B (0.00000688)
PCB-029 (2,4,5-TrCB)	---	---	---	---	0.000538 (0.00000788)	0.000422 B (0.000000869)	0.000646 (0.00000479)
PCB-031 (2,4',5-TrCB)	---	---	---	---	0.00173 B (0.00000782)	0.00149 B (0.000000863)	0.00219 B (0.00000475)
PCB-032 (2,4',6-TrCB)	---	---	---	---	0.000437 S (0.00000866)	0.00136 (0.00000344)	0.00102 (0.00000551)
PCB-033 (2,3',4'-TrCB)	---	---	---	---	0.000835 B (0.00000803)	0.000564 B (0.000000886)	0.000694 B (0.00000488)
PCB-034 (2,3',5'-TrCB)	---	---	---	---	U (0.00000819)	0.00000859 J (0.000000904)	0.0000138 J (0.00000498)
PCB-035 (3,3',4-TrCB)	---	---	---	---	U (0.00000842)	0.0000137 J (0.000000929)	0.0000165 EMPC J (0.00000512)
PCB-036 (3,3',5-TrCB)	---	---	---	---	U (0.00000814)	U (0.000000898)	0.0000148 J (0.00000494)
PCB-037 (3,4,4'-TrCB)	---	---	---	---	0.000196 J (0.00000835)	0.000268 B (0.000000921)	0.000339 (0.00000507)
PCB-038 (3,4,5-TrCB)	---	---	---	---	U (0.00000858)	U (0.000000947)	U (0.00000522)
PCB-039 (3,4',5-TrCB)	---	---	---	---	U (0.00000763)	U (0.000000842)	U (0.00000464)
PCB Aroclors							
PCBs (total)	0.025 (0.01)	0.0479 (0.011)	0.095 (0.0094)	U (0.0096)	U (0.00296)	U (0.00305)	0.014 (0.00317)
Aroclor-1016	U (0.01)	U (0.011)	U (0.0094)	U (0.0096)	U (0.00254)	U (0.00262)	0.014 (0.00272)
Aroclor-1242	0.025 J (0.01)	0.043 J (0.011)	0.095 (0.0094)	U (0.0096)	U (0.00188)	U (0.00193)	U (0.00201)
Aroclor-1248	U (0.01)	U (0.011)	U (0.0094)	U (0.0096)	U (0.0023)	U (0.00236)	U (0.00245)
Aroclor-1260	U (0.01)	0.0049 J (0.011)	U (0.0094)	U (0.0096)	U (0.00137)	U (0.00141)	U (0.00146)
Aroclor-1268	U (0.01)	U (0.011)	U (0.0094)	U (0.0096)	U (0.00274)	U (0.00283)	U (0.00293)
CDDF							
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	---	---	---	---	U (0.00000196)	---	0.00000096 EMPC J (0.000000238)
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	---	---	---	---	U (0.00000152)	---	0.000000944 EMPC J (0.000000192)
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	---	---	---	---	0.0000186 J (0.00000238)	---	UB (0.000000246)
Octachlorodibenzo-p-dioxin	---	---	---	---	0.000247 (0.00000259)	---	0.0000592 BJ (0.000000172)
2,3,7,8-Tetrachlorodibenzo-p-dioxin	---	---	---	---	U (0.00000402)	---	0.000000243 BJQ (0.00000012)
1,2,3,7,8-Pentachlorodibenzofuran	---	---	---	---	U (0.00000162)	---	UB (0.000000158)
1,2,3,4,7,8-Hexachlorodibenzofuran	---	---	---	---	U (0.000000989)	---	UB (0.000000164)
1,2,3,4,6,7,8-Heptachlorodibenzofuran	---	---	---	---	0.00000373 EMPC J (0.00000151)	---	UB (0.000000168)
Octachlorodibenzofuran	---	---	---	---	0.000013 JQ (0.00000273)	---	0.0000047 BJQ (0.000000156)

Notes:
1 All concentrations are presented in ug/L (ppb).
2 Only compounds with at least one detection are shown.

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05
ENVIRON Sample ID	MB-MW-05-20110412	MB-MW-05-20110727	MB-MW-05-20111027	MB-MW-05-20120425	MB-MW-05-20121018	MB-MW-05-20130411	MB-MW-05-20131010
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	4/12/2011	7/27/2011	10/27/2011	4/25/2012	10/18/2012	4/11/2013	10/10/2013
Comments							
SVOC							
Acenaphthene	---	40 (1.9)	---	39 (2)	64 (2.3)	16 (2.4)	59 (1.9)
Acenaphthylene	---	1.8 J (1.9)	---	2 (0.2)	2.3 (2.3)	1.2 J (2.4)	2 (1.9)
Acetophenone	---	U (0.76)	---	1.4 (1)	U (11)	U (12)	U (9.6)
Anthracene	---	3.1 (1.9)	---	5.4 (0.2)	5.9 (2.3)	1.7 J (2.4)	5.5 (1.9)
Benzaldehyde	---	U (1.4)	---	U (1)	U (11)	U (12)	U (9.6)
Benzo(a)anthracene	---	U (0.14)	---	0.25 (0.2)	U (2.3)	U (2.4)	U (1.9)
Benzo(a)pyrene	---	U (0.13)	---	0.057 J (0.2)	U (2.3)	U (2.4)	U (1.9)
Benzo(b)fluoranthene	---	U (0.15)	---	0.65 B (0.2)	U (2.3)	U (2.4)	U (1.9)
Benzo(g,h,i)perylene	---	U (0.14)	---	0.053 J (0.2)	U (2.3)	U (2.4)	U (1.9)
Benzo(k)fluoranthene	---	U (0.52)	---	U (0.2)	U (2.3)	U (2.4)	U (1.9)
Biphenyl	---	6.2 J (9.5)	---	9.2 B (1)	11 (11)	U (12)	9.3 J (9.6)
bis(2-Chloroethyl) ether	---	U (0.24)	---	0.23 (0.2)	U (2.3)	U (2.4)	U (1.9)
bis(2-Ethylhexyl)phthalate	---	U (12)	---	U (2)	U (23)	U (24)	U (19)
Butylbenzylphthalate	---	U (1.4)	---	U (1)	U (11)	U (12)	U (9.6)
Caprolactam	---	U (11)	---	U (5.1)	U (57)	U (59)	U (48)
Carbazole	---	20 (1.9)	---	32 (0.2)	36 (2.3)	3.1 (2.4)	44 (1.9)
4-Chloroaniline	---	U (0.84)	---	U (1)	U (11)	U (12)	U (9.6)
2-Chlorophenol	---	U (1.6)	---	0.42 J (1)	U (11)	U (12)	U (9.6)
4-Chlorophenyl-phenyl ether	---	U (0.48)	---	U (1)	U (11)	U (12)	U (9.6)
Chrysene	---	U (0.13)	---	0.24 (0.2)	U (2.3)	U (2.4)	U (1.9)
Dibenz(a,h)anthracene	---	U (0.15)	---	0.49 (0.2)	U (2.3)	U (2.4)	U (1.9)
Dibenzofuran	---	19 (9.5)	---	31 (1)	37 (11)	1.3 J (12)	33 (9.6)
2,4-Dichlorophenol	---	U (0.32)	---	UL (0.2)	U (2.3)	0.58 J (2.4)	U (1.9)
Diethylphthalate	---	U (1.4)	---	0.43 J (1)	U (11)	U (12)	U (9.6)
2,4-Dimethylphenol	---	29 (9.5)	---	42 L (10)	38 (11)	120 (12)	67 (9.6)
Dimethylphthalate	---	U (0.73)	---	U (1)	U (11)	U (12)	U (9.6)
Di-n-butylphthalate	---	U (1.2)	---	U (1)	U (11)	U (12)	U (9.6)
Di-n-octylphthalate	---	U (2)	---	U (1)	U (11)	U (12)	U (9.6)
Fluoranthene	---	3.2 (1.9)	---	6.9 (0.2)	7.1 (2.3)	5.5 (2.4)	7.5 (1.9)
Fluorene	---	23 (1.9)	---	39 (0.2)	45 (2.3)	1 J (2.4)	41 (1.9)
Indeno(1,2,3-cd)pyrene	---	U (0.19)	---	0.38 (0.2)	U (2.3)	U (2.4)	U (1.9)
Isophorone	---	U (0.61)	---	U (1)	U (11)	U (12)	U (9.6)
2-Methylnaphthalene	---	34 (1.9)	---	46 B (2)	70 (2.3)	U (2.4)	44 (1.9)
2-Methylphenol	---	1.5 J (9.5)	---	2.4 L (1)	1.4 J (11)	U (12)	U (9.6)
3&4-Methylphenol	---	---	---	0.59 J (1)	U (11)	U (12)	U (9.6)
4-Methylphenol	---	1 J (9.5)	---	---	---	---	---
Naphthalene	---	260 (1.9)	---	270 B (2)	420 (2.3)	U (2.4)	270 (1.9)
N-Nitrosodiphenylamine	---	U (0.81)	---	U (1)	U (11)	U (12)	U (9.6)
Pentachlorophenol	---	U (0.63)	---	UL (1)	U (11)	U (12)	U (9.6)
Phenanthrene	---	27 (1.9)	---	38 (2)	61 (2.3)	U (2.4)	42 (1.9)
Phenol	---	U (0.55)	---	0.16 J (0.2)	U (2.3)	U (2.4)	U (1.9)
Pyrene	---	1.8 J (1.9)	---	3.6 (0.2)	4.4 (2.3)	3.3 (2.4)	3.4 (1.9)
PCB Congeners							
13C12-PCB 114	---	---	0.00000763 EMPC J (0.000421)	---	---	---	---
PCB-001 (2-CB)	0.0143 (0.00000385)	0.014 B (0.0000042)	0.0161 B (0.000421)	---	---	---	---
PCB-002 (3-CB)	0.000521 (0.0000036)	0.00052 (0.0000045)	0.000592 EMPC (0.000421)	---	---	---	---
PCB-003 (4-CB)	0.00241 B (0.00000338)	0.0027 (0.0000048)	0.00283 B (0.000421)	---	---	---	---

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05
ENVIRON Sample ID	MB-MW-05-20110412	MB-MW-05-20110727	MB-MW-05-20111027	MB-MW-05-20120425	MB-MW-05-20121018	MB-MW-05-20130411	MB-MW-05-20131010
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	4/12/2011	7/27/2011	10/27/2011	4/25/2012	10/18/2012	4/11/2013	10/10/2013
Comments							
PCB-209 (DeCB)	0.0000638 J (0.00000713)	0.000093 J (0.0000061)	0.0000866 EMPC J (0.000421)	---	---	---	---
PCB-004 (2,2'-DiCB)	0.0104 B (0.0000216)	0.013 (0.000028)	0.0116 B (0.000632)	---	---	---	---
PCB-005 (2,3-DiCB)	0.0000454 EMPC J (0.0000168)	0.0056 (0.00002)	0.0000477 EMPC J (0.000421)	---	---	---	---
PCB-006 (2,3'-DiCB)	0.00257 B (0.0000158)	0.0038 (0.000019)	0.00325 B (0.000421)	---	---	---	---
PCB-007 (2,4-DiCB)	UB (0.0000162)	0.00014 EMPC J (0.00002)	0.000118 EMPC J (0.000421)	---	---	---	---
PCB-008 (2,4'-DiCB)	0.00389 B (0.0000155)	U (0.000019)	0.00528 B (0.000632)	---	---	---	---
PCB-009 (2,5-DiCB)	0.000193 EMPC J (0.0000163)	0.00023 EMPC (0.00002)	0.000212 EMPC J (0.000421)	---	---	---	---
PCB-010 (2,6-DiCB)	0.00021 EMPC J (0.0000175)	0.00021 EMPC J (0.000021)	0.000137 EMPC J (0.000421)	---	---	---	---
PCB-011 (3,3'-DiCB)	UB (0.0000155)	0.00013 EMPC J (0.000019)	0.0000787 EMPC J (0.000632)	---	---	---	---
PCB-012 (3,4-DiCB)	UB (0.0000159)	0.00046 (0.000019)	0.000423 J (0.000632)	---	---	---	---
PCB-013 (3,4'-DiCB)	UB (0.0000159)	0.00046 (0.000019)	0.000423 J (0.000632)	---	---	---	---
PCB-014 (3,5-DiCB)	U (0.0000137)	U (0.000017)	U (0.000421)	---	---	---	---
PCB-015 (4,4'-DiCB)	0.000791 EMPC (0.0000164)	0.00089 B (0.000019)	0.00098 (0.000421)	---	---	---	---
PCB-170 (2,2',3,3',4,4',5-HpCB)	UB (0.0000117)	0.000039 EMPC J (0.0000067)	0.0000616 EMPC J (0.000421)	---	---	---	---
PCB-171 (2,2',3,3',4,4',6-HpCB)	U (0.0000105)	0.00002 J (0.0000063)	U (0.000421)	---	---	---	---
PCB-172 (2,2',3,3',4,5,5'-HpCB)	U (0.0000104)	0.000017 EMPC J (0.0000063)	U (0.000421)	---	---	---	---
PCB-173 (2,2',3,3',4,5,6-HpCB)	U (0.0000105)	0.00002 J (0.0000063)	U (0.000421)	---	---	---	---
PCB-174 (2,2',3,3',4,5,6'-HpCB)	UB (0.00000973)	0.000062 EMPC J (0.0000059)	0.0000634 J (0.000421)	---	---	---	---
PCB-175 (2,2',3,3',4,5',6-HpCB)	U (0.00000934)	U (0.0000056)	U (0.000421)	---	---	---	---
PCB-177 (2,2',3,3',4,5',6'-HpCB)	UB (0.00000997)	0.000038 EMPC J (0.000006)	U (0.000421)	---	---	---	---
PCB-176 (2,2',3,3',4,6,6'-HpCB)	U (0.00000712)	0.0000065 EMPC J (0.0000043)	U (0.000421)	---	---	---	---
PCB-178 (2,2',3,3',5,5',6-HpCB)	UB (0.0000101)	0.000015 EMPC J (0.0000061)	U (0.000421)	---	---	---	---
PCB-179 (2,2',3,3',5,6,6'-HpCB)	UB (0.0000075)	0.000037 J (0.0000045)	0.0000306 EMPC J (0.000421)	---	---	---	---
PCB-180 (2,2',3,4,4',5,5'-HpCB)	UB (0.00000793)	0.00017 BJ (0.0000048)	0.000131 J (0.000421)	---	---	---	---
PCB-181 (2,2',3,4,4',5,6-HpCB)	U (0.00000933)	U (0.0000056)	U (0.000421)	---	---	---	---
PCB-182 (2,2',3,4,4',5,6'-HpCB)	U (0.00000907)	U (0.0000055)	U (0.000421)	---	---	---	---
PCB-183 (2,2',3,4,4',5',6-HpCB)	UB (0.00000927)	0.000046 EMPC J (0.0000056)	0.0000392 EMPC J (0.000421)	---	---	---	---
PCB-185 (2,2',3,4,5,5',6-HpCB)	0.0000408 J (0.00000927)	0.000046 JQ (0.0000056)	0.0000392 EMPC J (0.000421)	---	---	---	---
PCB-187 (2,2',3,4',5,5',6-HpCB)	UB (0.00000868)	0.00013 J (0.0000052)	0.000114 J (0.000421)	---	---	---	---
PCB-188 (2,2',3,4',5,6,6'-HpCB)	U (0.0000064)	U (0.000004)	U (0.000421)	---	---	---	---
PCB-189 (2,3,3',4,4',5,5'-HpCB)	U (0.00000553)	U (0.0000043)	U (0.000421)	---	---	---	---
PCB-190 (2,3,3',4,4',5,6-HpCB)	U (0.00000723)	0.000012 EMPC J (0.0000044)	U (0.000421)	---	---	---	---
PCB-191 (2,3,3',4,4',5',6-HpCB)	U (0.00000711)	U (0.0000043)	U (0.000421)	---	---	---	---
PCB-193 (2,3,3',4',5,5',6-HpCB)	UB (0.00000793)	0.00017 BJ (0.0000048)	0.000131 J (0.000421)	---	---	---	---
PCB-128 (2,2',3,3',4,4'-HxCB)	0.0000406 J (0.00000858)	0.000035 J (0.0000058)	0.0000219 J (0.000421)	---	---	---	---
PCB-129 (2,2',3,3',4,5-HxCB)	UB (0.00000887)	0.00026 B (0.000006)	0.000232 J (0.000421)	---	---	---	---
PCB-130 (2,2',3,3',4,5'-HxCB)	U (0.0000115)	U (0.0000077)	U (0.000421)	---	---	---	---
PCB-131 (2,2',3,3',4,6-HxCB)	U (0.0000117)	U (0.0000079)	U (0.000421)	---	---	---	---
PCB-132 (2,2',3,3',4,6'-HxCB)	0.0000758 J (0.0000112)	0.000096 J (0.0000075)	---	---	---	---	---
PCB-133 (2,2',3,3',5,5'-HxCB)	U (0.0000108)	U (0.0000073)	---	---	---	---	---
PCB-134 (2,2',3,3',5,6-HxCB)	U (0.0000115)	0.000011 EMPC J (0.0000077)	U (0.000421)	---	---	---	---
PCB-135 (2,2',3,3',5,6'-HxCB)	0.000083 J (0.0000125)	0.000067 EMPC J (0.0000075)	0.0000627 EMPC J (0.000421)	---	---	---	---
PCB-136 (2,2',3,3',6,6'-HxCB)	0.0000339 J (0.00000915)	0.000041 J (0.0000055)	0.0000234 EMPC J (0.000421)	---	---	---	---
PCB-137 (2,2',3,4,4',5-HxCB)	U (0.00000988)	U (0.0000067)	U (0.000421)	---	---	---	---
PCB-138 (2,2',3,4,4',5'-HxCB)	UB (0.00000887)	0.00026 B (0.000006)	---	---	---	---	---
PCB-139 (2,2',3,4,4',6-HxCB)	U (0.00000982)	U (0.0000066)	U (0.000421)	---	---	---	---
PCB-140 (2,2',3,4,4',6'-HxCB)	U (0.00000982)	U (0.0000066)	U (0.000421)	---	---	---	---
PCB-141 (2,2',3,4,5,5'-HxCB)	0.0000473 J (0.0000102)	0.000042 JQ (0.0000069)	0.0000407 J (0.000421)	---	---	---	---
PCB-143 (2,2',3,4,5,6'-HxCB)	U (0.0000115)	0.000011 EMPC J (0.0000077)	U (0.000421)	---	---	---	---
PCB-144 (2,2',3,4,5',6-HxCB)	U (0.0000116)	U (0.000007)	U (0.000421)	---	---	---	---
PCB-146 (2,2',3,4',5,5'-HxCB)	UB (0.00000933)	0.00004 J (0.0000063)	0.00004 J (0.000421)	---	---	---	---
PCB-147 (2,2',3,4',5,6-HxCB)	UB (0.00000954)	0.00022 B (0.0000064)	0.000187 EMPC J (0.000421)	---	---	---	---
PCB-148 (2,2',3,4',5,6'-HxCB)	U (0.0000122)	U (0.0000074)	U (0.000421)	---	---	---	---
PCB-149 (2,2',3,4',5',6-HxCB)	0.000214 BJ (0.00000954)	0.00022 B (0.0000064)	0.000187 EMPC J (0.000421)	---	---	---	---
PCB-150 (2,2',3,4',6,6'-HxCB)	U (0.00000853)	U (0.0000052)	U (0.000421)	---	---	---	---
PCB-151 (2,2',3,5,5',6-HxCB)	0.000083 J (0.0000125)	0.000067 EMPC J (0.0000075)	0.0000627 EMPC J (0.000421)	---	---	---	---
PCB-152 (2,2',3,5,6,6'-HxCB)	U (0.0000087)	U (0.0000053)	U (0.000421)	---	---	---	---
PCB-153 (2,2',4,4',5,5'-HxCB)	UB (0.00000767)	0.0002 BJ (0.0000052)	0.000178 J (0.000421)	---	---	---	---

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05
ENVIRON Sample ID	MB-MW-05-20110412	MB-MW-05-20110727	MB-MW-05-20111027	MB-MW-05-20120425	MB-MW-05-20121018	MB-MW-05-20130411	MB-MW-05-20131010
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	4/12/2011	7/27/2011	10/27/2011	4/25/2012	10/18/2012	4/11/2013	10/10/2013
Comments							
PCB-154 (2,2',4,4',5,6'-HxCB)	U (0.0000101)	U (0.0000061)	U (0.000421)	---	---	---	---
PCB-155 (2,2',4,4',6,6'-HxCB)	U (0.00000829)	U (0.000005)	U (0.000421)	---	---	---	---
PCB-156 (2,3,3',4,4',5-HxCB)	0.0000163 JQ (0.00000854)	0.000022 J (0.0000061)	0.0000158 EMPC J (0.000421)	---	---	---	---
PCB-157 (2,3,3',4,4',5'-HxCB)	UB (0.00000854)	0.000022 J (0.0000061)	0.0000158 EMPC J (0.000421)	---	---	---	---
PCB-158 (2,3,3',4,4',6-HxCB)	UB (0.000007)	0.00003 J (0.0000047)	0.0000172 EMPC J (0.000421)	---	---	---	---
PCB-159 (2,3,3',4,5,5'-HxCB)	U (0.0000075)	U (0.0000051)	U (0.000421)	---	---	---	---
PCB-160 (2,3,3',4,5,6-HxCB)	UB (0.00000887)	0.00026 B (0.000006)	0.000232 J (0.000421)	---	---	---	---
PCB-162 (2,3,3',4',5,5'-HxCB)	U (0.00000741)	U (0.000005)	U (0.000421)	---	---	---	---
PCB-163 (2,3,3',4',5,6-HxCB)	UB (0.00000887)	0.00026 B (0.000006)	0.000232 J (0.000421)	---	---	---	---
PCB-164 (2,3,3',4',5',6-HxCB)	UB (0.00000781)	0.0000094 EMPC J (0.0000053)	0.00000965 EMPC J (0.000421)	---	---	---	---
PCB-166 (2,3,4,4',5,6-HxCB)	0.0000406 J (0.00000858)	0.000035 J (0.0000058)	0.0000219 J (0.000421)	---	---	---	---
PCB-167 (2,3',4,4',5,5'-HxCB)	U (0.00000623)	0.0000064 EMPC J (0.0000038)	U (0.000421)	---	---	---	---
PCB-168 (2,3',4,4',5',6-HxCB)	UB (0.00000767)	0.0002 BJ (0.0000052)	0.000178 J (0.000421)	---	---	---	---
PCB-169 (3,3',4,4',5,5'-HxCB)	U (0.00000587)	U (0.000004)	U (0.000421)	---	---	---	---
PCB-206 (2,2',3,3',4,4',5,5',6-NoCB)	0.000345 J (0.0000166)	0.00043 (0.0000073)	0.000379 J (0.000421)	---	---	---	---
PCB-207 (2,2',3,3',4,4',5,6,6'-NoCB)	U (0.0000122)	0.000032 EMPC J (0.0000054)	0.000026 EMPC J (0.000421)	---	---	---	---
PCB-208 (2,2',3,3',4,5,5',6,6'-NoCB)	0.000124 EMPC J (0.000013)	0.00018 J (0.0000058)	0.00015 J (0.000421)	---	---	---	---
PCB-194 (2,2',3,3',4,4',5,5'-OcCB)	0.0000681 J (0.00000562)	0.000078 JQ (0.0000049)	0.0000806 J (0.000421)	---	---	---	---
PCB-195 (2,2',3,3',4,4',5,6-OcCB)	UB (0.0000061)	U (0.0000054)	U (0.000421)	---	---	---	---
PCB-196 (2,2',3,3',4,4',5,6'-OcCB)	UB (0.00000811)	0.000056 J (0.0000069)	---	---	---	---	---
PCB-197 (2,2',3,3',4,4',6,6'-OcCB)	U (0.00000603)	U (0.0000051)	U (0.000421)	---	---	---	---
PCB-198 (2,2',3,3',4,5,5',6-OcCB)	UB (0.00000837)	0.00027 (0.0000071)	0.000295 J (0.000421)	---	---	---	---
PCB-199 (2,2',3,3',4,5,5',6'-OcCB)	UB (0.00000837)	0.00027 (0.0000071)	0.0000175 J (0.000421)	---	---	---	---
PCB-200 (2,2',3,3',4,5,6,6'-OcCB)	U (0.00000592)	0.000014 EMPC J (0.000005)	0.00000939 EMPC J (0.000421)	---	---	---	---
PCB-201 (2,2',3,3',4,5',6,6'-OcCB)	UB (0.00000572)	0.000021 EMPC J (0.0000049)	0.000295 J (0.000421)	---	---	---	---
PCB-202 (2,2',3,3',5,5',6,6'-OcCB)	0.0000576 EMPC J (0.00000644)	0.000068 EMPC J (0.0000055)	0.0000629 EMPC J (0.000421)	---	---	---	---
PCB-203 (2,2',3,4,4',5,5',6-OcCB)	UB (0.00000748)	0.00022 (0.0000064)	0.000175 J (0.000421)	---	---	---	---
PCB-204 (2,2',3,4,4',5,6,6'-OcCB)	U (0.00000627)	U (0.0000053)	U (0.000421)	---	---	---	---
PCB-205 (2,3,3',4,4',5,5',6-OcCB)	U (0.00000473)	U (0.0000042)	U (0.000421)	---	---	---	---
PCB-24/27	---	---	U (0.000421)	---	---	---	---
PCB-42/59	---	---	0.000247 J (0.000421)	---	---	---	---
PCB-52/69	---	---	0.00124 B (0.000421)	---	---	---	---
PCB-61/70	---	---	0.000816 BC (0.000421)	---	---	---	---
PCB-90/101	---	---	0.000306 J (0.000421)	---	---	---	---
PCB-107/109	---	---	0.0000114 EMPC J (0.000421)	---	---	---	---
PCB-132/161	---	---	0.0000818 EMPC J (0.000421)	---	---	---	---
PCB-133/142	---	---	U (0.000421)	---	---	---	---
PCB-138/163/164	---	---	0.000232 J (0.000421)	---	---	---	---
PCB-196/203	---	---	0.0000301 EMPC J (0.000421)	---	---	---	---
PCB-082 (2,2',3,3',4-PeCB)	0.0000303 EMPC J (0.0000115)	0.000033 EMPC J (0.000009)	0.0000497 EMPC J (0.000421)	---	---	---	---
PCB-083 (2,2',3,3',5-PeCB)	0.000122 EMPC J (0.00000963)	0.00018 J (0.0000076)	0.000109 EMPC J (0.000421)	---	---	---	---
PCB-084 (2,2',3,3',6-PeCB)	0.0000857 J (0.0000109)	0.00015 J (0.0000086)	0.000128 J (0.000421)	---	---	---	---
PCB-085 (2,2',3,4,4'-PeCB)	0.0000322 EMPC J (0.00000793)	0.000065 EMPC J (0.0000062)	0.0000571 J (0.000421)	---	---	---	---
PCB-086 (2,2',3,4,5-PeCB)	UB (0.00000811)	0.00022 EMPC (0.0000064)	0.000197 J (0.000421)	---	---	---	---
PCB-087 (2,2',3,4,5'-PeCB)	0.000195 BJ (0.00000811)	0.00022 Q (0.0000064)	0.000197 J (0.000421)	---	---	---	---
PCB-088 (2,2',3,4,6-PeCB)	0.0000368 J (0.00000975)	0.000059 EMPC J (0.0000077)	0.0000582 J (0.000421)	---	---	---	---
PCB-089 (2,2',3,4,6'-PeCB)	U (0.0000106)	U (0.0000083)	U (0.000421)	---	---	---	---
PCB-090 (2,2',3,4',5-PeCB)	0.000249 BJQ (0.00000825)	0.00029 BQ (0.0000065)	---	---	---	---	---
PCB-097 (2,2',3,4',5'-PeCB)	UB (0.00000811)	0.00022 EMPC (0.0000064)	0.000197 J (0.000421)	---	---	---	---
PCB-091 (2,2',3,4',6-PeCB)	0.0000368 J (0.00000975)	0.000059 JQ (0.0000077)	0.0000582 J (0.000421)	---	---	---	---
PCB-098 (2,2',3,4',6'-PeCB)	U (0.00000912)	0.000019 EMPC J (0.0000072)	U (0.000421)	---	---	---	---
PCB-092 (2,2',3,5,5'-PeCB)	0.0000405 EMPC J (0.00000937)	0.000063 J (0.0000074)	0.0000568 J (0.000421)	---	---	---	---
PCB-093 (2,2',3,5,6-PeCB)	U (0.00000941)	U (0.0000074)	U (0.000421)	---	---	---	---
PCB-094 (2,2',3,5,6'-PeCB)	U (0.0000106)	U (0.0000083)	U (0.000421)	---	---	---	---
PCB-095 (2,2',3,5',6-PeCB)	0.000314 J (0.00000997)	0.0004 (0.0000078)	0.000322 EMPC J (0.000421)	---	---	---	---
PCB-096 (2,2',3,6,6'-PeCB)	U (0.00000792)	U (0.0000062)	U (0.000421)	---	---	---	---
PCB-099 (2,2',4,4',5-PeCB)	0.000122 JQ (0.00000963)	0.00018 J (0.0000076)	0.000109 EMPC J (0.000421)	---	---	---	---
PCB-100 (2,2',4,4',6-PeCB)	U (0.00000941)	U (0.0000074)	U (0.000421)	---	---	---	---
PCB-101 (2,2',4,5,5'-PeCB)	UB (0.00000825)	0.00029 EMPC (0.0000065)	0.000306 J (0.000421)	---	---	---	---
PCB-102 (2,2',4,5,6'-PeCB)	U (0.00000912)	0.000019 JQ (0.0000072)	U (0.000421)	---	---	---	---

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05
ENVIRON Sample ID	MB-MW-05-20110412	MB-MW-05-20110727	MB-MW-05-20111027	MB-MW-05-20120425	MB-MW-05-20121018	MB-MW-05-20130411	MB-MW-05-20131010
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	4/12/2011	7/27/2011	10/27/2011	4/25/2012	10/18/2012	4/11/2013	10/10/2013
Comments							
PCB-103 (2,2',4,5',6-PeCB)	U (0.00000929)	U (0.0000073)	U (0.000421)	---	---	---	---
PCB-104 (2,2',4,6,6'-PeCB)	U (0.00000706)	U (0.0000056)	U (0.000421)	---	---	---	---
PCB-105 (2,3,3',4,4'-PeCB)	UB (0.00000458)	0.000088 J (0.0000045)	0.0000958 J (0.000421)	---	---	---	---
PCB-108 (2,3,3',4,5'-PeCB)	UB (0.00000523)	U (0.0000047)	U (0.000421)	---	---	---	---
PCB-109 (2,3,3',4,6-PeCB)	UB (0.00000811)	0.00022 EMPC (0.0000064)	0.000197 J (0.000421)	---	---	---	---
PCB-107 (2,3,3',4',5-PeCB)	UB (0.00000497)	0.000013 J (0.0000045)	---	---	---	---	---
PCB-110 (2,3,3',4',6-PeCB)	0.000326 J (0.000007)	0.00044 B (0.0000055)	0.00036 J (0.000421)	---	---	---	---
PCB-111 (2,3,3',5,5'-PeCB)	U (0.00000663)	U (0.0000052)	U (0.000421)	---	---	---	---
PCB-113 (2,3,3',5',6-PeCB)	UB (0.00000825)	0.00029 EMPC (0.0000065)	0.000306 J (0.000421)	---	---	---	---
PCB-114 (2,3,4,4',5-PeCB)	U (0.00000474)	U (0.000004)	---	---	---	---	---
PCB-115 (2,3,4,4',6-PeCB)	0.000326 J (0.000007)	0.00044 B (0.0000055)	0.00036 J (0.000421)	---	---	---	---
PCB-116 (2,3,4,5,6-PeCB)	0.0000322 JQ (0.00000793)	0.000065 JQ (0.0000062)	0.0000571 J (0.000421)	---	---	---	---
PCB-117 (2,3,4',5,6-PeCB)	0.0000322 EMPC J (0.00000793)	0.000065 EMPC J (0.0000062)	0.0000571 J (0.000421)	---	---	---	---
PCB-118 (2,3',4,4',5-PeCB)	0.000219 J (0.00000513)	0.00023 B (0.0000044)	0.000212 J (0.000421)	---	---	---	---
PCB-119 (2,3',4,4',6-PeCB)	UB (0.00000811)	0.00022 EMPC (0.0000064)	0.000197 J (0.000421)	---	---	---	---
PCB-120 (2,3',4,5,5'-PeCB)	U (0.00000682)	U (0.0000054)	U (0.000421)	---	---	---	---
PCB-121 (2,3',4,5',6-PeCB)	U (0.00000688)	U (0.0000054)	U (0.000421)	---	---	---	---
PCB-122 (2,3,3',4',5'-PeCB)	U (0.00000558)	0.0000076 JQ (0.000005)	U (0.000421)	---	---	---	---
PCB-123 (2,3',4,4',5'-PeCB)	U (0.00000521)	U (0.0000048)	U (0.000421)	---	---	---	---
PCB-124 (2,3',4',5,5'-PeCB)	UB (0.00000523)	U (0.0000047)	U (0.000421)	---	---	---	---
PCB-125 (2,3',4',5',6-PeCB)	UB (0.00000811)	0.00022 EMPC (0.0000064)	0.000197 J (0.000421)	---	---	---	---
PCB-126 (3,3',4,4',5-PeCB)	U (0.00000495)	U (0.0000044)	U (0.000421)	---	---	---	---
PCB-127 (3,3',4,5,5'-PeCB)	U (0.00000507)	U (0.0000045)	U (0.000421)	---	---	---	---
PCB-040 (2,2',3,3'-TeCB)	0.000457 B (0.00000961)	0.00049 (0.000006)	0.000615 C (0.000421)	---	---	---	---
PCB-041 (2,2',3,4-TeCB)	0.000457 B (0.00000961)	0.00049 (0.000006)	0.000615 C40 (0.000421)	---	---	---	---
PCB-042 (2,2',3,4'-TeCB)	0.000189 BJ (0.00000978)	0.00021 EMPC J (0.0000061)	---	---	---	---	---
PCB-043 (2,2',3,5-TeCB)	UB (0.00000898)	0.000029 EMPC J (0.0000056)	0.0000296 EMPC J (0.000421)	---	---	---	---
PCB-044 (2,2',3,5'-TeCB)	0.00081 B (0.0000086)	0.00088 B (0.0000054)	0.00103 BC (0.000421)	---	---	---	---
PCB-045 (2,2',3,6-TeCB)	0.000279 J (0.00000996)	0.00033 (0.0000062)	0.000354 J (0.000421)	---	---	---	---
PCB-046 (2,2',3,6'-TeCB)	0.000101 J (0.0000118)	0.000097 EMPC J (0.0000074)	0.000146 J (0.000421)	---	---	---	---
PCB-047 (2,2',4,4'-TeCB)	0.00081 B (0.0000086)	0.00088 B (0.0000054)	0.00103 BC44 (0.000421)	---	---	---	---
PCB-048 (2,2',4,5-TeCB)	0.000139 BJ (0.00000954)	0.00016 J (0.000006)	0.000181 J (0.000421)	---	---	---	---
PCB-049 (2,2',4,5'-TeCB)	0.000487 B (0.00000792)	0.00052 B (0.0000049)	0.000586 BC (0.000421)	---	---	---	---
PCB-050 (2,2',4,6-TeCB)	UB (0.00000925)	0.00027 (0.0000058)	0.000311 J (0.000421)	---	---	---	---
PCB-051 (2,2',4,6'-TeCB)	0.000279 J (0.00000996)	0.00033 (0.0000062)	0.000354 J (0.000421)	---	---	---	---
PCB-052 (2,2',5,5'-TeCB)	0.000929 B (0.00000927)	0.00099 B (0.0000058)	---	---	---	---	---
PCB-053 (2,2',5,6'-TeCB)	UB (0.00000925)	0.00027 (0.0000058)	0.000311 J (0.000421)	---	---	---	---
PCB-054 (2,2',6,6'-TeCB)	U (0.0000165)	U (0.000029)	U (0.000421)	---	---	---	---
PCB-055 (2,3,3',4-TeCB)	U (0.00000745)	0.000013 EMPC J (0.0000046)	U (0.000421)	---	---	---	---
PCB-056 (2,3,3',4'-TeCB)	0.00019 BJ (0.00000701)	0.00021 B (0.0000044)	0.000205 J (0.000421)	---	---	---	---
PCB-057 (2,3,3',5-TeCB)	U (0.00000709)	U (0.0000044)	U (0.000421)	---	---	---	---
PCB-058 (2,3,3',5'-TeCB)	U (0.00000705)	U (0.0000044)	U (0.000421)	---	---	---	---
PCB-059 (2,3,3',6-TeCB)	UB (0.00000684)	0.000079 J (0.0000043)	0.0000766 J (0.000421)	---	---	---	---
PCB-060 (2,3,4,4'-TeCB)	0.0000985 J (0.00000722)	0.00012 J (0.0000045)	0.0000736 EMPC J (0.000421)	---	---	---	---
PCB-061 (2,3,4,5-TeCB)	0.00073 B (0.00000684)	0.00078 B (0.0000043)	---	---	---	---	---
PCB-062 (2,3,4,6-TeCB)	UB (0.00000684)	0.000079 J (0.0000043)	0.0000766 J (0.000421)	---	---	---	---
PCB-063 (2,3,4',5-TeCB)	U (0.00000657)	0.000023 J (0.0000041)	0.0000137 EMPC J (0.000421)	---	---	---	---
PCB-064 (2,3,4',6-TeCB)	0.000246 EMPC J (0.00000648)	0.00031 B (0.000004)	0.000341 J (0.000421)	---	---	---	---
PCB-065 (2,3,5,6-TeCB)	0.00081 B (0.0000086)	0.00088 B (0.0000054)	0.00103 BC44 (0.000421)	---	---	---	---
PCB-066 (2,3',4,4'-TeCB)	0.000386 BJ (0.00000679)	0.00042 B (0.0000042)	0.000396 J (0.000421)	---	---	---	---
PCB-067 (2,3',4,5-TeCB)	UB (0.00000637)	0.000019 J (0.000004)	0.0000152 EMPC J (0.000421)	---	---	---	---
PCB-068 (2,3',4,5'-TeCB)	U (0.00000642)	U (0.000004)	U (0.000421)	---	---	---	---
PCB-069 (2,3',4,6-TeCB)	0.000487 B (0.00000792)	0.00052 B (0.0000049)	0.000586 BC49 (0.000421)	---	---	---	---
PCB-070 (2,3',4',5-TeCB)	0.00073 B (0.00000684)	0.00078 B (0.0000043)	0.000816 BC61 (0.000421)	---	---	---	---
PCB-076 (2,3',4',5'-TeCB)	0.00073 B (0.00000684)	0.00078 B (0.0000043)	0.000816 BC61 (0.000421)	---	---	---	---
PCB-071 (2,3',4',6-TeCB)	0.000457 B (0.00000961)	0.00049 (0.000006)	0.000615 C40 (0.000421)	---	---	---	---
PCB-072 (2,3',5,5'-TeCB)	U (0.0000069)	U (0.0000043)	U (0.000421)	---	---	---	---
PCB-073 (2,3',5',6-TeCB)	UB (0.00000898)	0.000029 EMPC J (0.0000056)	0.0000296 EMPC J (0.000421)	---	---	---	---
PCB-074 (2,4,4',5-TeCB)	0.00073 B (0.00000684)	0.00078 B (0.0000043)	0.000816 BC61 (0.000421)	---	---	---	---
PCB-075 (2,4,4',6-TeCB)	UB (0.00000684)	0.000079 J (0.0000043)	0.0000766 J (0.000421)	---	---	---	---
PCB-077 (3,3',4,4'-TeCB)	UB (0.00000646)	0.000024 EMPC J (0.000004)	0.0000227 EMPC J (0.000421)	---	---	---	---

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05	MB-MW-05
ENVIRON Sample ID	MB-MW-05-20110412	MB-MW-05-20110727	MB-MW-05-20111027	MB-MW-05-20120425	MB-MW-05-20121018	MB-MW-05-20130411	MB-MW-05-20131010
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	4/12/2011	7/27/2011	10/27/2011	4/25/2012	10/18/2012	4/11/2013	10/10/2013
Comments							
PCB-078 (3,3',4,5-TeCB)	U (0.00000733)	U (0.0000046)	U (0.000421)	---	---	---	---
PCB-079 (3,3',4,5'-TeCB)	U (0.00000643)	U (0.000004)	U (0.000421)	---	---	---	---
PCB-081 (3,4,4',5-TeCB)	U (0.00000683)	U (0.0000043)	U (0.000421)	---	---	---	---
PCB-016 (2,2',3-TrCB)	0.00113 B (0.0000143)	0.0011 EMPC (0.000012)	0.00153 (0.000421)	---	---	---	---
PCB-017 (2,2',4-TrCB)	0.00113 B (0.0000119)	0.0014 (0.0000099)	0.00117 (0.000421)	---	---	---	---
PCB-018 (2,2',5-TrCB)	0.0028 B (0.0000106)	0.0035 B (0.0000088)	0.0037 BC (0.000632)	---	---	---	---
PCB-019 (2,2',6-TrCB)	0.00103 (0.0000146)	0.0012 (0.000012)	0.0012 (0.000421)	---	---	---	---
PCB-020 (2,3,3'-TrCB)	0.0017 B (0.00000484)	0.0018 B (0.0000046)	0.00221 BC (0.000421)	---	---	---	---
PCB-021 (2,3,4-TrCB)	UB (0.00000485)	0.00035 B (0.0000046)	0.000557 BC (0.000421)	---	---	---	---
PCB-022 (2,3,4'-TrCB)	0.000589 B (0.00000493)	0.00052 B (0.0000047)	0.000648 B (0.000421)	---	---	---	---
PCB-023 (2,3,5-TrCB)	U (0.00000503)	U (0.0000048)	U (0.000421)	---	---	---	---
PCB-024 (2,3,6-TrCB)	0.00004 EMPC J (0.00001)	0.00017 EMPC J (0.0000083)	---	---	---	---	---
PCB-025 (2,3',4-TrCB)	0.000214 BJ (0.00000448)	0.00023 (0.0000043)	0.000306 J (0.000421)	---	---	---	---
PCB-026 (2,3',5-TrCB)	0.000437 BJ (0.00000476)	0.00049 B (0.0000046)	0.000664 C (0.000421)	---	---	---	---
PCB-027 (2,3',6-TrCB)	0.000345 J (0.00000863)	0.00046 (0.0000072)	0.00043 (0.000421)	---	---	---	---
PCB-028 (2,4,4'-TrCB)	0.0017 B (0.00000484)	0.0018 B (0.0000046)	0.00221 BC20 (0.000421)	---	---	---	---
PCB-030 (2,4,6-TrCB)	0.0028 B (0.0000106)	0.0035 B (0.0000088)	0.0037 BC18 (0.000632)	---	---	---	---
PCB-029 (2,4,5-TrCB)	0.000437 BJ (0.00000476)	0.00049 B (0.0000046)	0.000664 C26 (0.000421)	---	---	---	---
PCB-031 (2,4',5-TrCB)	0.00139 B (0.00000472)	0.0014 B (0.0000045)	0.00198 B (0.000421)	---	---	---	---
PCB-032 (2,4',6-TrCB)	0.000736 S (0.00000846)	0.00029 J (0.000007)	0.000661 S (0.000421)	---	---	---	---
PCB-033 (2,3',4'-TrCB)	UB (0.00000485)	0.00035 B (0.0000046)	0.000557 BC21 (0.000421)	---	---	---	---
PCB-034 (2,3',5'-TrCB)	UB (0.00000495)	0.00001 EMPC J (0.0000047)	0.0000151 J (0.000421)	---	---	---	---
PCB-035 (3,3',4-TrCB)	UB (0.00000508)	0.000011 J (0.0000049)	U (0.000421)	---	---	---	---
PCB-036 (3,3',5-TrCB)	U (0.00000491)	U (0.0000047)	U (0.000421)	---	---	---	---
PCB-037 (3,4,4'-TrCB)	UB (0.00000504)	0.00019 J (0.0000048)	0.000209 J (0.000421)	---	---	---	---
PCB-038 (3,4,5-TrCB)	U (0.00000518)	U (0.000005)	U (0.000421)	---	---	---	---
PCB-039 (3,4',5-TrCB)	U (0.00000461)	U (0.0000044)	U (0.000421)	---	---	---	---
PCB Aroclors							
PCBs (total)	U (0.0719)	U (0.0028)	U (0.51)	U (0.01)	U (0.011)	U (0.011)	U (0.0095)
Aroclor-1016	U (0.00264)	U (0.0024)	U (0.51)	U (0.01)	U (0.011)	U (0.011)	U (0.0095)
Aroclor-1242	U (0.0248)	U (0.0018)	U (0.51)	U (0.01)	U (0.011)	U (0.011)	U (0.0095)
Aroclor-1248	U (0.00239)	U (0.0022)	U (0.51)	U (0.01)	U (0.011)	U (0.011)	U (0.0095)
Aroclor-1260	U (0.00142)	U (0.0013)	U (0.51)	U (0.01)	U (0.011)	U (0.011)	U (0.0095)
Aroclor-1268	U (0.00285)	U (0.0026)	U (0.51)	U (0.01)	U (0.011)	U (0.011)	U (0.0095)
CDDF							
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	---	U (0.00000045)	---	---	---	---	---
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	---	0.0000013 J (0.0000004)	---	---	---	---	---
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	---	UB (0.00000053)	---	---	---	---	---
Octachlorodibenzo-p-dioxin	---	UB (0.00000073)	---	---	---	---	---
2,3,7,8-Tetrachlorodibenzo-p-dioxin	---	0.00000023 JQ (0.00000021)	---	---	---	---	---
1,2,3,7,8-Pentachlorodibenzofuran	---	U (0.00000031)	---	---	---	---	---
1,2,3,4,7,8-Hexachlorodibenzofuran	---	UB (0.00000031)	---	---	---	---	---
1,2,3,4,6,7,8-Heptachlorodibenzofuran	---	UB (0.0000003)	---	---	---	---	---
Octachlorodibenzofuran	---	0.0000026 BJQ (0.00000031)	---	---	---	---	---

Notes:
1 All concentrations are presented in ug/L (ppb).
2 Only compounds with at least one detection are shown.

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06
ENVIRON Sample ID	MB-MW-06-20100728	MB-MW-06-20101019	MB-MW-06-20110112	MB-MW-06-20110412	MB-MW-06-20110726	MB-MW-06-20111026	MB-MW-06-20120425
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	7/28/2010	10/19/2010	1/12/2011	4/12/2011	7/26/2011	10/26/2011	4/25/2012
Comments							
SVOC							
Acenaphthene	2.08 J (0.153)	---	U (0.153)	---	0.69 J (2.1)	---	1.8 (0.2)
Acenaphthylene	U (0.161)	---	U (0.161)	---	U (0.16)	---	U (0.2)
Acetophenone	U (0.848)	---	U (0.848)	---	U (0.84)	---	U (1)
Anthracene	0.507 J (0.163)	---	U (0.163)	---	U (0.16)	---	0.19 J (0.2)
Benzaldehyde	U (1.59)	---	U (1.59)	---	U (1.6)	---	0.73 J (1)
Benzo(a)anthracene	U (0.156)	---	0.688 J (0.156)	---	U (0.15)	---	0.083 J (0.2)
Benzo(a)pyrene	U (0.142)	---	U (0.142)	---	U (0.14)	---	0.044 J (0.2)
Benzo(b)fluoranthene	0.19 J (0.166)	---	U (0.166)	---	U (0.17)	---	0.64 B (0.2)
Benzo(g,h,i)perylene	U (0.16)	---	U (0.16)	---	U (0.16)	---	0.05 J (0.2)
Benzo(k)fluoranthene	U (0.58)	---	U (0.58)	---	U (0.58)	---	U (0.2)
Biphenyl	U (0.44)	---	U (0.44)	---	U (0.44)	---	0.1 B (1)
bis(2-Chloroethyl) ether	U (0.266)	---	U (0.266)	---	U (0.26)	---	U (0.2)
bis(2-Ethylhexyl)phthalate	U (13.3)	---	U (13.3)	---	U (13)	---	U (2)
Butylbenzylphthalate	U (1.51)	---	U (1.51)	---	U (1.5)	---	U (1)
Caprolactam	32.1 J (12.6)	---	U (12.6)	---	22 J (53)	---	U (5.1)
Carbazole	0.596 J (0.167)	---	U (0.167)	---	U (0.17)	---	U (0.2)
4-Chloroaniline	U (0.938)	---	U (0.938)	---	U (0.93)	---	U (1)
2-Chlorophenol	U (1.75)	---	U (1.75)	---	U (1.7)	---	UL (1)
4-Chlorophenyl-phenyl ether	U (0.533)	---	U (0.533)	---	U (0.53)	---	U (1)
Chrysene	U (0.148)	---	0.506 J (0.148)	---	U (0.15)	---	0.07 J (0.2)
Dibenz(a,h)anthracene	U (0.164)	---	U (0.164)	---	U (0.16)	---	0.5 (0.2)
Dibenzofuran	U (0.654)	---	U (0.654)	---	U (0.65)	---	U (1)
2,4-Dichlorophenol	U (0.354)	---	U (0.354)	---	U (0.35)	---	0.039 J (0.2)
Diethylphthalate	U (1.55)	---	U (1.55)	---	U (1.5)	---	0.16 J (1)
2,4-Dimethylphenol	U (0.903)	---	U (0.903)	---	U (0.9)	---	UL (1)
Dimethylphthalate	U (0.811)	---	U (0.811)	---	U (0.81)	---	U (1)
Di-n-butylphthalate	U (1.32)	---	U (1.32)	---	U (1.3)	---	U (1)
Di-n-octylphthalate	4.35 J (2.19)	---	U (2.19)	---	U (2.2)	---	U (1)
Fluoranthene	0.61 J (0.172)	---	0.34 J (0.172)	---	U (0.17)	---	0.22 (0.2)
Fluorene	U (0.229)	---	U (0.229)	---	U (0.23)	---	U (0.2)
Indeno(1,2,3-cd)pyrene	U (0.211)	---	U (0.211)	---	U (0.21)	---	0.38 (0.2)
Isophorone	U (0.683)	---	U (0.683)	---	U (0.68)	---	U (1)
2-Methylnaphthalene	U (0.129)	---	U (0.129)	---	U (0.13)	---	0.17 B (0.2)
2-Methylphenol	U (0.914)	---	U (0.914)	---	U (0.91)	---	UL (1)
3&4-Methylphenol	---	---	---	---	---	---	UL (1)
4-Methylphenol	U (0.956)	---	U (0.956)	---	U (0.95)	---	---
Naphthalene	U (0.148)	---	U (0.148)	---	U (0.15)	---	0.42 B (0.2)
N-Nitrosodiphenylamine	U (0.904)	---	U (0.904)	---	U (0.9)	---	U (1)
Pentachlorophenol	U (0.703)	---	U (0.703)	---	U (0.7)	---	UL (1)
Phenanthrene	0.815 J (0.453)	---	U (0.453)	---	U (0.45)	---	0.076 J (0.2)
Phenol	U (0.616)	---	U (0.616)	---	U (0.61)	---	0.1 J (0.2)
Pyrene	0.565 J (0.166)	---	0.306 J (0.166)	---	U (0.17)	---	0.14 J (0.2)
PCB Congeners							
13C12-PCB 114	---	---	---	---	---	U (0.0000421)	---
PCB-001 (2-CB)	0.00268 (0.0000018)	0.00231 B (0.000000829)	0.00223 B (0.000000666)	0.002 (0.000000317)	0.0027 B (0.00000048)	0.00272 B (0.0000421)	---
PCB-002 (3-CB)	U (0.00000182)	0.00000722 EMPC J (0.000000889)	0.00000491 J (0.000000784)	0.0000088 J (0.00000034)	0.0000063 J (0.0000005)	0.0000116 B (0.0000421)	---
PCB-003 (4-CB)	0.0000688 (0.00000184)	0.0000526 B (0.000000952)	0.0000504 (0.000000938)	0.0000732 B (0.000000364)	0.00007 (0.00000053)	0.0000506 EMPC (0.0000421)	---

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06
ENVIRON Sample ID	MB-MW-06-20100728	MB-MW-06-20101019	MB-MW-06-20110112	MB-MW-06-20110412	MB-MW-06-20110726	MB-MW-06-20111026	MB-MW-06-20120425
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	7/28/2010	10/19/2010	1/12/2011	4/12/2011	7/26/2011	10/26/2011	4/25/2012
Comments							
PCB-209 (DeCB)	0.0000532 (0.00000223)	0.000101 (0.00000261)	0.000141 (0.000002)	0.000548 (0.00000117)	0.000046 EMPC (0.0000013)	0.0000319 EMPC J (0.0000421)	---
PCB-004 (2,2'-DiCB)	0.00663 (0.00000911)	0.00659 B (0.00000693)	0.00576 (0.00000343)	0.00477 B (0.00000187)	0.0069 (0.0000029)	0.0061 B (0.0000632)	---
PCB-005 (2,3-DiCB)	0.00000936 J (0.00000597)	0.0000123 EMPC J (0.00000443)	0.00000481 EMPC J (0.00000262)	0.0000117 EMPC J (0.00000137)	0.0000087 J (0.000002)	0.000011 B (0.0000421)	---
PCB-006 (2,3'-DiCB)	0.000359 (0.00000561)	0.000381 B (0.00000417)	0.000321 (0.00000246)	0.000349 B (0.00000129)	0.00033 (0.0000019)	0.000299 B (0.0000421)	---
PCB-007 (2,4-DiCB)	0.0000252 J (0.00000577)	0.0000297 EMPC J (0.00000429)	0.0000252 EMPC J (0.00000253)	0.0000248 EMPC J (0.00000132)	0.00002 EMPC J (0.0000019)	0.0000192 B (0.0000421)	---
PCB-008 (2,4'-DiCB)	0.000975 B (0.00000549)	0.000979 B (0.00000408)	0.000853 B (0.00000241)	0.000944 B (0.00000126)	0.00086 B (0.0000018)	0.000771 B (0.0000632)	---
PCB-009 (2,5-DiCB)	0.0000392 JQ (0.0000058)	0.0000573 B (0.00000431)	0.0000387 EMPC J (0.00000254)	0.0000417 EMPC J (0.00000133)	0.000038 J (0.0000019)	0.0000421 EMPC (0.0000421)	---
PCB-010 (2,6-DiCB)	0.000151 (0.00000623)	0.000128 (0.00000463)	0.000153 (0.00000273)	0.0000997 (0.00000143)	0.00015 (0.0000021)	0.000116 (0.0000421)	---
PCB-011 (3,3'-DiCB)	UB (0.00000552)	0.0000628 B (0.0000041)	UB (0.00000242)	UB (0.00000127)	UB (0.0000019)	0.0000137 B (0.0000632)	---
PCB-012 (3,4-DiCB)	0.0000158 JQ (0.00000566)	0.0000353 EMPC J (0.00000421)	0.0000278 EMPC J (0.00000248)	0.0000521 EMPC J (0.0000013)	0.000021 J (0.0000019)	0.0000216 B (0.0000632)	---
PCB-013 (3,4'-DiCB)	0.0000158 JQ (0.00000566)	0.0000353 EMPC J (0.00000421)	0.0000278 EMPC J (0.00000248)	0.0000521 EMPC J (0.0000013)	0.000021 J (0.0000019)	0.0000216 B (0.0000632)	---
PCB-014 (3,5-DiCB)	U (0.00000488)	U (0.00000363)	U (0.00000214)	UB (0.00000112)	U (0.0000016)	0.00000167 B (0.0000421)	---
PCB-015 (4,4'-DiCB)	0.0000978 Q (0.00000521)	0.000137 B (0.00000382)	0.000127 B (0.00000252)	0.000238 B (0.00000128)	0.000089 EMPC (0.0000018)	0.0000861 (0.0000421)	---
PCB-170 (2,2',3,3',4,4',5-HpCB)	0.0000539 (0.00000323)	0.0000996 (0.00000239)	0.000136 (0.00000242)	0.000425 (0.0000018)	0.000038 J (0.0000012)	0.0000424 (0.0000421)	---
PCB-171 (2,2',3,3',4,4',6-HpCB)	0.0000165 JQ (0.00000286)	0.0000271 J (0.00000222)	0.0000241 EMPC J (0.00000208)	0.000124 (0.0000016)	0.000012 J (0.0000012)	0.0000123 EMPC J (0.0000421)	---
PCB-172 (2,2',3,3',4,5,5'-HpCB)	0.00000786 J (0.00000283)	0.0000142 EMPC J (0.0000022)	0.0000141 EMPC J (0.00000205)	0.000061 (0.00000158)	0.0000059 EMPC J (0.0000012)	0.00000422 EMPC J (0.0000421)	---
PCB-173 (2,2',3,3',4,5,6-HpCB)	0.0000165 JQ (0.00000286)	0.0000271 J (0.00000222)	0.0000241 EMPC J (0.00000208)	0.000124 (0.0000016)	0.000012 J (0.0000012)	0.0000123 EMPC J (0.0000421)	---
PCB-174 (2,2',3,3',4,5,6'-HpCB)	0.0000633 (0.00000265)	0.000093 (0.00000206)	0.000126 (0.00000192)	UB (0.00000148)	0.00004 BJ (0.0000011)	0.0000344 EMPC J (0.0000421)	---
PCB-175 (2,2',3,3',4,5',6-HpCB)	U (0.00000255)	0.00000341 J (0.00000198)	U (0.00000185)	UB (0.00000142)	U (0.000001)	U (0.0000421)	---
PCB-177 (2,2',3,3',4,5',6'-HpCB)	0.0000252 JQ (0.00000272)	0.0000543 (0.00000211)	0.0000619 EMPC (0.00000197)	UB (0.00000152)	0.000021 EMPC J (0.0000011)	0.0000231 J (0.0000421)	---
PCB-176 (2,2',3,3',4,6,6'-HpCB)	0.00000544 JQ (0.00000194)	0.0000125 J (0.0000015)	0.0000133 EMPC J (0.00000141)	0.0000491 (0.00000108)	0.000005 EMPC J (0.00000079)	0.00000335 EMPC J (0.0000421)	---
PCB-178 (2,2',3,3',5,5',6-HpCB)	0.0000092 JQ (0.00000276)	0.0000175 EMPC J (0.00000214)	0.0000233 J (0.000002)	0.00009 (0.00000154)	0.000007 EMPC J (0.0000011)	0.00000904 EMPC J (0.0000421)	---
PCB-179 (2,2',3,3',5,6,6'-HpCB)	0.0000238 JQ (0.00000205)	0.0000439 (0.00000159)	0.000058 (0.00000148)	0.000188 (0.00000114)	0.000022 J (0.00000083)	0.0000173 EMPC J (0.0000421)	---
PCB-180 (2,2',3,4,4',5,5'-HpCB)	0.000136 (0.00000216)	0.000205 (0.00000168)	0.000292 (0.00000157)	0.000921 B (0.00000121)	0.00009 B (0.00000088)	0.000101 C (0.0000421)	---
PCB-181 (2,2',3,4,4',5,6-HpCB)	U (0.00000255)	U (0.00000197)	U (0.00000185)	0.00000309 J (0.00000142)	U (0.000001)	U (0.0000421)	---
PCB-182 (2,2',3,4,4',5,6'-HpCB)	U (0.00000248)	U (0.00000192)	U (0.00000179)	0.00000245 EMPC J (0.00000138)	U (0.000001)	U (0.0000421)	---
PCB-183 (2,2',3,4,4',5',6-HpCB)	0.0000367 J (0.00000253)	0.0000713 (0.00000196)	0.0000839 (0.00000183)	UB (0.00000141)	0.000033 J (0.000001)	0.0000307 J (0.0000421)	---
PCB-185 (2,2',3,4,5,5',6-HpCB)	0.0000367 J (0.00000253)	0.0000713 (0.00000196)	0.0000839 (0.00000183)	0.000296 (0.00000141)	0.000033 J (0.000001)	0.0000307 J (0.0000421)	---
PCB-187 (2,2',3,4',5,5',6-HpCB)	0.0000868 (0.00000237)	0.000134 (0.00000184)	0.000186 (0.00000172)	UB (0.00000132)	0.000062 (0.00000096)	0.0000639 (0.0000421)	---
PCB-188 (2,2',3,4',5,6,6'-HpCB)	U (0.00000173)	U (0.00000137)	U (0.00000123)	U (0.000000966)	U (0.00000073)	U (0.0000421)	---
PCB-189 (2,3,3',4,4',5,5'-HpCB)	U (0.00000177)	0.00000233 EMPC J (0.000000818)	0.00000313 EMPC J (0.0000012)	0.0000112 EMPC J (0.000000823)	0.0000014 EMPC J (0.00000077)	U (0.0000421)	---
PCB-190 (2,3,3',4,4',5,6-HpCB)	0.0000117 J (0.00000197)	0.0000168 J (0.00000153)	0.0000246 J (0.00000143)	0.0000739 (0.0000011)	0.0000078 J (0.0000008)	0.00000562 EMPC J (0.0000421)	---
PCB-191 (2,3,3',4,4',5',6-HpCB)	U (0.00000194)	U (0.0000015)	0.0000045 J (0.00000141)	0.0000157 J (0.00000108)	0.0000018 EMPC J (0.00000079)	U (0.0000421)	---
PCB-193 (2,3,3',4',5,5',6-HpCB)	0.000136 (0.00000216)	0.000205 (0.00000168)	0.000292 (0.00000157)	0.000921 B (0.00000121)	0.00009 B (0.00000088)	0.000101 C180 (0.0000421)	---
PCB-128 (2,2',3,3',4,4'-HxCB)	0.0000308 J (0.00000299)	0.0000496 (0.00000172)	0.0000652 (0.00000189)	0.0002 (0.00000138)	0.000024 J (0.0000011)	0.0000204 J (0.0000421)	---
PCB-129 (2,2',3,3',4,5-HxCB)	0.000237 B (0.00000309)	0.000337 B (0.00000178)	0.000539 B (0.00000195)	0.00157 B (0.00000143)	0.00018 B (0.0000011)	0.000177 C (0.0000421)	---
PCB-130 (2,2',3,3',4,5'-HxCB)	U (0.00000399)	0.0000194 J (0.0000023)	0.0000258 J (0.00000252)	0.0000834 (0.00000184)	0.0000085 EMPC J (0.0000015)	0.00000959 J (0.0000421)	---
PCB-131 (2,2',3,3',4,6-HxCB)	U (0.00000409)	U (0.00000236)	0.00000468 J (0.00000258)	0.0000154 EMPC J (0.00000189)	U (0.0000015)	U (0.0000421)	---
PCB-132 (2,2',3,3',4,6'-HxCB)	0.0000846 (0.00000389)	0.000117 (0.00000224)	0.000179 (0.00000246)	0.000483 (0.0000018)	0.000062 (0.0000014)	---	---
PCB-133 (2,2',3,3',5,5'-HxCB)	U (0.00000375)	0.00000601 J (0.00000216)	0.00000582 JQ (0.00000237)	0.0000232 J (0.00000173)	0.0000032 J (0.0000014)	---	---
PCB-134 (2,2',3,3',5,6-HxCB)	0.0000095 JQ (0.00000399)	0.0000236 J (0.0000023)	0.0000325 J (0.00000253)	0.00008 (0.00000185)	0.0000089 EMPC J (0.0000015)	0.00000697 EMPC J (0.0000421)	---
PCB-135 (2,2',3,3',5,6'-HxCB)	0.0000749 Q (0.00000342)	0.000123 EMPC (0.00000306)	0.000163 (0.0000021)	0.000496 (0.00000197)	0.000074 (0.0000016)	0.000056 C (0.0000421)	---
PCB-136 (2,2',3,3',6,6'-HxCB)	0.0000277 J (0.00000251)	0.0000472 (0.00000225)	0.0000662 (0.00000154)	0.000194 (0.00000145)	0.000029 J (0.0000012)	0.0000237 J (0.0000421)	---
PCB-137 (2,2',3,4,4',5-HxCB)	0.0000069 JQ (0.00000344)	0.0000146 J (0.00000198)	0.0000159 JQ (0.00000218)	0.0000613 (0.00000159)	0.0000061 JQ (0.0000013)	0.00000529 EMPC J (0.0000421)	---
PCB-138 (2,2',3,4,4',5'-HxCB)	0.000237 B (0.00000309)	0.000337 B (0.00000178)	0.000539 B (0.00000195)	0.00157 B (0.00000143)	0.00018 B (0.0000011)	---	---
PCB-139 (2,2',3,4,4',6-HxCB)	U (0.00000342)	0.00000854 J (0.00000197)	0.00000692 J (0.00000216)	0.0000239 J (0.00000158)	U (0.0000012)	0.00000211 EMPC J (0.0000421)	---
PCB-140 (2,2',3,4,4',6'-HxCB)	U (0.00000342)	0.00000854 J (0.00000197)	0.00000692 J (0.00000216)	0.0000239 J (0.00000158)	U (0.0000012)	0.00000211 EMPC J (0.0000421)	---
PCB-141 (2,2',3,4,5,5'-HxCB)	0.000044 (0.00000356)	0.0000661 (0.00000205)	0.0001 (0.00000225)	0.000275 (0.00000165)	0.000034 J (0.0000013)	0.0000204 EMPC J (0.0000421)	---
PCB-143 (2,2',3,4,5,6'-HxCB)	0.0000095 JQ (0.00000399)	0.0000236 J (0.0000023)	0.0000325 J (0.00000253)	0.00008 (0.00000185)	0.0000089 EMPC J (0.0000015)	0.00000697 EMPC J (0.0000421)	---
PCB-144 (2,2',3,4,5',6-HxCB)	0.00000861 JQ (0.00000317)	0.0000142 EMPC J (0.00000284)	0.0000167 J (0.00000195)	0.0000613 (0.00000183)	0.0000099 J (0.0000015)	0.0000052 EMPC J (0.0000421)	---
PCB-146 (2,2',3,4',5,5'-HxCB)	0.0000287 JQ (0.00000325)	0.0000501 (0.00000187)	0.0000733 (0.00000205)	0.000214 (0.0000015)	0.000027 J (0.0000012)	0.0000266 J (0.0000421)	---
PCB-147 (2,2',3,4',5,6-HxCB)	0.000203 B (0.00000332)	0.000267 B (0.00000192)	0.00044 (0.0000021)	0.0012 B (0.00000154)	0.00015 B (0.0000012)	0.000142 C (0.0000421)	---
PCB-148 (2,2',3,4',5,6'-HxCB)	U (0.00000335)	U (0.00000301)	U (0.00000206)	0.00000308 EMPC J (0.00000194)	U (0.0000016)	U (0.0000421)	---
PCB-149 (2,2',3,4',5',6-HxCB)	0.000203 B (0.00000332)	0.000267 B (0.00000192)	0.00044 (0.0000021)	0.0012 B (0.00000154)	0.00015 B (0.0000012)	0.000142 C147 (0.0000421)	---
PCB-150 (2,2',3,4',6,6'-HxCB)	U (0.00000234)	U (0.0000021)	U (0.00000144)	0.00000332 JQ (0.00000135)	U (0.0000011)	U (0.0000421)	---
PCB-151 (2,2',3,5,5',6-HxCB)	0.0000749 Q (0.00000342)	0.000123 EMPC (0.00000306)	0.000163 (0.0000021)	0.000496 (0.00000197)	0.000074 (0.0000016)	0.000056 C135 (0.0000421)	---
PCB-152 (2,2',3,5,6,6'-HxCB)	U (0.00000238)	U (0.00000214)	U (0.00000147)	U (0.00000138)	U (0.0000011)	U (0.0000421)	---
PCB-153 (2,2',4,4',5,5'-HxCB)	0.00019 B (0.00000267)	0.000267 B (0.00000154)	0.00042 (0.00000169)	0.00123 B (0.00000124)	0.00014 B (0.00000098)	0.000136 C (0.0000421)	---

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06
ENVIRON Sample ID	MB-MW-06-20100728	MB-MW-06-20101019	MB-MW-06-20110112	MB-MW-06-20110412	MB-MW-06-20110726	MB-MW-06-20111026	MB-MW-06-20120425
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	7/28/2010	10/19/2010	1/12/2011	4/12/2011	7/26/2011	10/26/2011	4/25/2012
Comments							
PCB-154 (2,2',4,4',5,6'-HxCB)	U (0.00000278)	U (0.00000249)	0.0000034 EMPC J (0.00000171)	0.0000211 J (0.0000016)	U (0.0000013)	U (0.0000421)	---
PCB-155 (2,2',4,4',6,6'-HxCB)	U (0.00000227)	U (0.00000204)	U (0.0000014)	U (0.00000131)	U (0.0000011)	U (0.0000421)	---
PCB-156 (2,3,3',4,4',5-HxCB)	0.0000194 J (0.00000314)	0.0000349 J (0.00000184)	0.0000449 (0.00000215)	0.000152 (0.0000015)	0.000015 J (0.0000012)	0.0000149 J (0.0000421)	---
PCB-157 (2,3,3',4,4',5'-HxCB)	0.0000194 J (0.00000314)	0.0000349 J (0.00000184)	0.0000449 (0.00000215)	0.000152 (0.0000015)	0.000015 J (0.0000012)	0.0000149 J (0.0000421)	---
PCB-158 (2,3,3',4,4',6-HxCB)	0.0000195 J (0.00000244)	0.0000334 J (0.00000141)	0.0000507 (0.00000154)	0.000143 (0.00000113)	0.000017 J (0.00000089)	0.0000138 J (0.0000421)	---
PCB-159 (2,3,3',4,5,5'-HxCB)	U (0.00000261)	0.00000294 J (0.00000151)	0.00000464 J (0.00000165)	UB (0.00000121)	0.0000015 EMPC J (0.00000095)	U (0.0000421)	---
PCB-160 (2,3,3',4,5,6-HxCB)	0.000237 B (0.00000309)	0.000337 B (0.00000178)	0.000539 B (0.00000195)	0.00157 B (0.00000143)	0.00018 B (0.0000011)	0.000177 C129 (0.0000421)	---
PCB-162 (2,3,3',4',5,5'-HxCB)	U (0.00000258)	U (0.00000149)	U (0.00000163)	0.00000364 EMPC J (0.00000119)	U (0.00000094)	U (0.0000421)	---
PCB-163 (2,3,3',4',5,6-HxCB)	0.000237 B (0.00000309)	0.000337 B (0.00000178)	0.000539 B (0.00000195)	0.00157 B (0.00000143)	0.00018 B (0.0000011)	0.000177 C129 (0.0000421)	---
PCB-164 (2,3,3',4',5',6-HxCB)	0.0000126 JQ (0.00000272)	0.0000257 J (0.00000157)	0.0000335 J (0.00000172)	0.000101 (0.00000126)	0.000012 J (0.00000099)	0.0000103 J (0.0000421)	---
PCB-166 (2,3,4,4',5,6-HxCB)	0.0000308 J (0.00000299)	0.0000496 (0.00000172)	0.0000652 (0.00000189)	0.0002 (0.00000138)	0.000024 J (0.0000011)	0.0000204 J (0.0000421)	---
PCB-167 (2,3',4,4',5,5'-HxCB)	0.00000637 J (0.00000194)	0.0000103 EMPC J (0.00000108)	0.0000124 J (0.00000118)	0.0000514 (0.000000949)	0.0000054 EMPC J (0.0000007)	0.00000374 EMPC J (0.0000421)	---
PCB-168 (2,3',4,4',5',6-HxCB)	0.00019 B (0.00000267)	0.000267 B (0.00000154)	0.00042 (0.00000169)	0.00123 B (0.00000124)	0.00014 B (0.00000098)	0.000136 C153 (0.0000421)	---
PCB-169 (3,3',4,4',5,5'-HxCB)	U (0.00000214)	U (0.00000126)	U (0.00000127)	U (0.000000889)	U (0.00000079)	U (0.0000421)	---
PCB-206 (2,2',3,3',4,4',5,5',6-NoCB)	0.000149 (0.00000212)	0.000253 (0.000002)	0.000383 (0.00000204)	0.00152 (0.00000151)	0.00013 (0.0000013)	0.0000942 (0.0000421)	---
PCB-207 (2,2',3,3',4,4',5,6,6'-NoCB)	0.00000965 J (0.00000143)	0.000023 J (0.00000133)	0.0000278 J (0.00000144)	0.000126 (0.00000112)	0.0000093 EMPC J (0.00000087)	0.0000054 EMPC J (0.0000421)	---
PCB-208 (2,2',3,3',4,5,5',6,6'-NoCB)	0.0000502 (0.00000144)	0.0000893 (0.00000132)	0.000136 (0.00000149)	0.000534 (0.0000012)	0.000043 (0.00000089)	0.0000357 J (0.0000421)	---
PCB-194 (2,2',3,3',4,4',5,5'-OcCB)	0.0000418 (0.00000172)	0.0000767 Q (0.00000145)	0.0000948 (0.00000187)	0.00032 (0.000000874)	0.000031 J (0.00000089)	0.0000258 EMPC J (0.0000421)	---
PCB-195 (2,2',3,3',4,4',5,6-OcCB)	0.00000828 J (0.00000187)	0.000017 EMPC J (0.00000157)	0.0000254 J (0.00000203)	0.0000789 (0.000000949)	0.0000072 EMPC J (0.00000096)	0.00000497 EMPC J (0.0000421)	---
PCB-196 (2,2',3,3',4,4',5,6'-OcCB)	0.0000187 J (0.00000198)	0.0000343 J (0.00000253)	0.0000458 (0.00000192)	0.000161 (0.00000118)	0.000016 EMPC J (0.0000012)	---	---
PCB-197 (2,2',3,3',4,4',6,6'-OcCB)	U (0.00000147)	U (0.00000188)	0.00000223 J (0.00000143)	0.00000728 EMPC J (0.000000879)	U (0.00000088)	U (0.0000421)	---
PCB-198 (2,2',3,3',4,5,5',6-OcCB)	0.0000931 (0.00000204)	0.000158 (0.00000261)	0.000215 (0.00000198)	0.000836 (0.00000122)	0.000061 (0.0000012)	0.0000563 C (0.0000421)	---
PCB-199 (2,2',3,3',4,5,5',6'-OcCB)	0.0000931 (0.00000204)	0.000158 (0.00000261)	0.000215 (0.00000198)	0.000836 (0.00000122)	0.000061 (0.0000012)	0.00000429 J (0.0000421)	---
PCB-200 (2,2',3,3',4,5,6,6'-OcCB)	0.00000557 JQ (0.00000144)	0.00000889 EMPC J (0.00000185)	0.0000112 J (0.0000014)	0.0000389 J (0.000000863)	0.0000027 EMPC J (0.00000086)	0.00000616 EMPC J (0.0000421)	---
PCB-201 (2,2',3,3',4,5',6,6'-OcCB)	0.00000597 J (0.0000014)	0.000016 J (0.00000178)	0.0000136 J (0.00000135)	0.0000659 (0.000000833)	0.0000069 J (0.00000083)	0.0000563 C198 (0.0000421)	---
PCB-202 (2,2',3,3',5,5',6,6'-OcCB)	0.0000269 J (0.00000157)	0.0000412 EMPC (0.00000201)	0.0000619 (0.00000152)	0.000221 (0.000000938)	0.000019 EMPC J (0.00000094)	0.0000166 EMPC J (0.0000421)	---
PCB-203 (2,2',3,4,4',5,5',6-OcCB)	0.0000652 (0.00000182)	0.000101 (0.00000233)	0.000152 (0.00000177)	0.00052 (0.00000109)	0.000051 (0.0000011)	0.0000482 (0.0000421)	---
PCB-204 (2,2',3,4,4',5,6,6'-OcCB)	U (0.00000153)	U (0.00000195)	U (0.00000148)	U (0.000000913)	U (0.00000091)	U (0.0000421)	---
PCB-205 (2,3,3',4,4',5,5',6-OcCB)	U (0.00000145)	U (0.00000122)	0.00000301 J (0.00000158)	0.00000915 J (0.000000736)	0.0000012 EMPC J (0.00000075)	U (0.0000421)	---
PCB-24/27	---	---	---	---	---	0.0000101 EMPC J (0.0000421)	---
PCB-42/59	---	---	---	---	---	0.0000871 (0.0000421)	---
PCB-52/69	---	---	---	---	---	0.000533 B (0.0000421)	---
PCB-61/70	---	---	---	---	---	0.000264 BC (0.0000421)	---
PCB-90/101	---	---	---	---	---	0.000195 C (0.0000421)	---
PCB-107/109	---	---	---	---	---	0.00000701 EMPC J (0.0000421)	---
PCB-132/161	---	---	---	---	---	0.0000529 (0.0000421)	---
PCB-133/142	---	---	---	---	---	U (0.0000421)	---
PCB-138/163/164	---	---	---	---	---	0.000177 C129 (0.0000421)	---
PCB-196/203	---	---	---	---	---	0.0000162 J (0.0000421)	---
PCB-082 (2,2',3,3',4-PeCB)	0.0000257 J (0.00000416)	0.0000535 EMPC (0.00000343)	0.0000545 (0.00000208)	0.000163 (0.0000017)	0.000022 EMPC J (0.0000015)	0.0000195 EMPC J (0.0000421)	---
PCB-083 (2,2',3,3',5-PeCB)	0.000138 (0.00000349)	0.000239 (0.00000289)	0.000231 (0.00000175)	0.000743 (0.00000143)	0.00011 (0.0000012)	0.000108 C (0.0000421)	---
PCB-084 (2,2',3,3',6-PeCB)	0.0000826 (0.00000397)	0.000157 (0.00000328)	0.000167 (0.00000199)	0.000405 (0.00000163)	0.000089 (0.0000014)	0.0000899 (0.0000421)	---
PCB-085 (2,2',3,4,4'-PeCB)	0.0000376 J (0.00000288)	0.0000648 (0.00000238)	0.0000616 (0.00000144)	0.000223 (0.00000118)	0.000035 J (0.000001)	0.0000307 J (0.0000421)	---
PCB-086 (2,2',3,4,5-PeCB)	0.000137 Q (0.00000294)	0.000271 (0.00000243)	0.000261 (0.00000147)	0.000824 B (0.00000121)	0.00013 (0.000001)	0.000108 EMPC (0.0000421)	---
PCB-087 (2,2',3,4,5'-PeCB)	0.000137 Q (0.00000294)	0.000271 (0.00000243)	0.000261 (0.00000147)	0.000824 B (0.00000121)	0.00013 (0.000001)	0.000108 EMPC (0.0000421)	---
PCB-088 (2,2',3,4,6-PeCB)	0.0000478 (0.00000354)	0.000081 EMPC (0.00000292)	0.0000801 (0.00000177)	0.000233 (0.00000145)	0.000038 EMPC J (0.0000012)	0.0000393 J (0.0000421)	---
PCB-089 (2,2',3,4,6'-PeCB)	U (0.00000384)	0.00001 J (0.00000318)	0.00000693 EMPC J (0.00000192)	0.0000199 J (0.00000157)	0.0000033 EMPC J (0.0000013)	U (0.0000421)	---
PCB-090 (2,2',3,4',5-PeCB)	0.000246 B (0.000003)	0.000381 B (0.00000247)	0.000417 B (0.0000015)	0.0013 B (0.00000123)	0.00021 B (0.000001)	---	---
PCB-097 (2,2',3,4',5'-PeCB)	0.000137 Q (0.00000294)	0.000271 (0.00000243)	0.000261 (0.00000147)	0.000824 B (0.00000121)	0.00013 (0.000001)	0.000108 EMPC (0.0000421)	---
PCB-091 (2,2',3,4',6-PeCB)	0.0000478 (0.00000354)	0.000081 Q (0.00000292)	0.0000801 (0.00000177)	0.000233 (0.00000145)	0.000038 JQ (0.0000012)	0.0000393 J (0.0000421)	---
PCB-098 (2,2',3,4',6'-PeCB)	0.000014 J (0.00000331)	0.0000201 EMPC J (0.00000273)	0.0000185 J (0.00000165)	0.0000502 EMPC (0.00000136)	0.00001 EMPC J (0.0000012)	0.00000557 EMPC J (0.0000421)	---
PCB-092 (2,2',3,5,5'-PeCB)	0.0000437 Q (0.0000034)	0.0000697 (0.00000281)	0.0000839 (0.0000017)	0.000243 (0.00000139)	0.000046 (0.0000012)	0.0000353 EMPC J (0.0000421)	---
PCB-093 (2,2',3,5,6-PeCB)	0.00000321 J (0.00000341)	0.00000735 EMPC J (0.00000282)	0.0000045 EMPC J (0.00000171)	0.0000315 BJ (0.0000014)	0.0000043 EMPC J (0.0000012)	0.0000046 EMPC J (0.0000421)	---
PCB-094 (2,2',3,5,6'-PeCB)	U (0.00000384)	U (0.00000317)	U (0.00000192)	0.0000138 J (0.00000157)	U (0.0000013)	U (0.0000421)	---
PCB-095 (2,2',3,5',6-PeCB)	0.0003 (0.00000362)	0.000443 (0.00000299)	0.000505 (0.00000181)	0.00124 (0.00000148)	0.00027 (0.0000013)	0.000283 (0.0000421)	---
PCB-096 (2,2',3,6,6'-PeCB)	U (0.00000287)	0.00000866 J (0.00000238)	0.00000663 J (0.00000144)	0.0000175 J (0.00000118)	0.0000039 J (0.000001)	U (0.0000421)	---
PCB-099 (2,2',4,4',5-PeCB)	0.000138 (0.00000349)	0.000239 (0.00000289)	0.000231 (0.00000175)	0.000743 (0.00000143)	0.00011 (0.0000012)	0.000108 C83 (0.0000421)	---
PCB-100 (2,2',4,4',6-PeCB)	0.00000321 J (0.00000341)	0.00000735 EMPC J (0.00000282)	0.0000045 EMPC J (0.00000171)	0.0000315 BJ (0.0000014)	0.0000043 EMPC J (0.0000012)	0.0000046 EMPC J (0.0000421)	---
PCB-101 (2,2',4,5,5'-PeCB)	0.000246 B (0.000003)	0.000381 B (0.00000247)	0.000417 B (0.0000015)	0.0013 B (0.00000123)	0.00021 B (0.000001)	0.000195 C90 (0.0000421)	---
PCB-102 (2,2',4,5,6'-PeCB)	0.000014 J (0.00000331)	0.0000201 JQ (0.00000273)	0.0000185 J (0.00000165)	0.0000502 Q (0.00000136)	0.00001 JQ (0.0000012)	0.00000557 EMPC J (0.0000421)	---

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06
ENVIRON Sample ID	MB-MW-06-20100728	MB-MW-06-20101019	MB-MW-06-20110112	MB-MW-06-20110412	MB-MW-06-20110726	MB-MW-06-20111026	MB-MW-06-20120425
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	7/28/2010	10/19/2010	1/12/2011	4/12/2011	7/26/2011	10/26/2011	4/25/2012
Comments							
PCB-103 (2,2',4,5',6-PeCB)	U (0.00000337)	U (0.00000278)	0.00000556 J (0.00000168)	0.0000194 J (0.00000138)	U (0.0000012)	U (0.0000421)	---
PCB-104 (2,2',4,6,6'-PeCB)	U (0.00000256)	U (0.00000212)	U (0.00000128)	0.00000286 J (0.00000105)	U (0.0000009)	U (0.0000421)	---
PCB-105 (2,3,3',4,4'-PeCB)	0.0000611 (0.00000206)	0.0000853 (0.000000916)	0.000125 (0.00000122)	0.000394 B (0.000000769)	0.000041 J (0.00000076)	0.0000422 EMPC (0.0000421)	---
PCB-108 (2,3,3',4,5'-PeCB)	0.00000537 J (0.00000219)	0.0000102 EMPC J (0.000000994)	0.00000894 EMPC J (0.00000133)	0.0000385 BJ (0.000000823)	0.0000037 EMPC J (0.00000079)	0.0000057 J (0.0000421)	---
PCB-109 (2,3,3',4,6-PeCB)	0.000137 Q (0.00000294)	0.000271 (0.00000243)	0.000261 (0.00000147)	0.000824 B (0.00000121)	0.00013 (0.000001)	0.000108 EMPC (0.0000421)	---
PCB-107 (2,3,3',4',5-PeCB)	0.00000757 JQ (0.00000209)	0.0000179 J (0.000000945)	0.0000227 J (0.00000126)	0.0000731 B (0.000000783)	0.0000064 EMPC J (0.00000075)	---	---
PCB-110 (2,3,3',4',6-PeCB)	0.000303 (0.00000254)	0.000486 B (0.0000021)	0.000499 B (0.00000127)	0.00162 (0.00000104)	0.00025 B (0.00000089)	0.000246 BC (0.0000421)	---
PCB-111 (2,3,3',5,5'-PeCB)	U (0.00000241)	U (0.00000199)	U (0.0000012)	UB (0.000000986)	U (0.00000084)	U (0.0000421)	---
PCB-113 (2,3,3',5',6-PeCB)	0.000246 B (0.000003)	0.000381 B (0.00000247)	0.000417 B (0.0000015)	0.0013 B (0.00000123)	0.00021 B (0.000001)	0.000195 C90 (0.0000421)	---
PCB-114 (2,3,4,4',5-PeCB)	0.00000207 JQ (0.00000195)	0.00000578 J (0.000000896)	0.00000605 EMPC J (0.00000117)	0.0000235 J (0.000000734)	0.0000025 EMPC J (0.00000072)	---	---
PCB-115 (2,3,4,4',6-PeCB)	0.000303 (0.00000254)	0.000486 B (0.0000021)	0.000499 B (0.00000127)	0.00162 (0.00000104)	0.00025 B (0.00000089)	0.000246 BC110 (0.0000421)	---
PCB-116 (2,3,4,5,6-PeCB)	0.0000376 J (0.00000288)	0.0000648 (0.00000238)	0.0000616 (0.00000144)	0.000223 (0.00000118)	0.000035 J (0.000001)	0.0000307 J (0.0000421)	---
PCB-117 (2,3,4',5,6-PeCB)	0.0000376 J (0.00000288)	0.0000648 (0.00000238)	0.0000616 (0.00000144)	0.000223 (0.00000118)	0.000035 J (0.000001)	0.0000307 J (0.0000421)	---
PCB-118 (2,3',4,4',5-PeCB)	0.000164 B (0.00000195)	0.000223 B (0.000000912)	0.000336 B (0.00000122)	0.00106 (0.00000078)	0.00011 B (0.00000073)	0.000123 EMPC (0.0000421)	---
PCB-119 (2,3',4,4',6-PeCB)	0.000137 Q (0.00000294)	0.000271 (0.00000243)	0.000261 (0.00000147)	0.000824 B (0.00000121)	0.00013 (0.000001)	0.000108 EMPC (0.0000421)	---
PCB-120 (2,3',4,5,5'-PeCB)	U (0.00000248)	U (0.00000205)	U (0.00000124)	UB (0.00000101)	U (0.00000087)	U (0.0000421)	---
PCB-121 (2,3',4,5',6-PeCB)	U (0.0000025)	U (0.00000206)	U (0.00000125)	U (0.00000102)	U (0.00000087)	U (0.0000421)	---
PCB-122 (2,3,3',4',5'-PeCB)	U (0.00000234)	0.00000396 J (0.00000106)	0.00000551 J (0.00000142)	0.0000146 J (0.000000878)	0.0000019 JQ (0.00000084)	0.00000177 EMPC J (0.0000421)	---
PCB-123 (2,3',4,4',5'-PeCB)	0.00000242 JQ (0.00000217)	0.0000042 EMPC J (0.000000969)	0.00000458 J (0.00000129)	0.0000191 EMPC J (0.000000855)	0.0000017 EMPC J (0.00000079)	U (0.0000421)	---
PCB-124 (2,3',4',5,5'-PeCB)	0.00000537 J (0.00000219)	0.0000102 EMPC J (0.000000994)	0.00000894 EMPC J (0.00000133)	0.0000385 BJ (0.000000823)	0.0000037 EMPC J (0.00000079)	0.0000057 J (0.0000421)	---
PCB-125 (2,3',4',5',6-PeCB)	0.000137 Q (0.00000294)	0.000271 (0.00000243)	0.000261 (0.00000147)	0.000824 B (0.00000121)	0.00013 (0.000001)	0.000108 EMPC (0.0000421)	---
PCB-126 (3,3',4,4',5-PeCB)	U (0.00000219)	0.00000242 EMPC J (0.000000982)	U (0.00000135)	0.00000321 EMPC J (0.000000741)	U (0.00000072)	U (0.0000421)	---
PCB-127 (3,3',4,5,5'-PeCB)	U (0.00000213)	U (0.000000963)	U (0.00000129)	UB (0.000000797)	U (0.00000076)	U (0.0000421)	---
PCB-040 (2,2',3,3'-TeCB)	0.000202 (0.00000387)	0.000316 (0.00000182)	0.000374 (0.00000204)	0.000677 B (0.0000011)	0.00019 (0.0000011)	0.000208 C (0.0000421)	---
PCB-041 (2,2',3,4-TeCB)	0.000202 (0.00000387)	0.000316 (0.00000182)	0.000374 (0.00000204)	0.000677 B (0.0000011)	0.00019 (0.0000011)	0.000208 C40 (0.0000421)	---
PCB-042 (2,2',3,4'-TeCB)	0.0000883 (0.00000394)	0.00014 (0.00000185)	0.000174 (0.00000208)	0.000307 B (0.00000112)	0.000086 (0.0000012)	---	---
PCB-043 (2,2',3,5-TeCB)	0.0000153 J (0.00000362)	0.0000242 J (0.0000017)	0.000027 J (0.00000191)	0.0000371 BJ (0.00000102)	0.000011 J (0.0000011)	0.0000101 EMPC J (0.0000421)	---
PCB-044 (2,2',3,5'-TeCB)	0.000453 B (0.00000346)	0.00065 B (0.00000163)	0.000843 B (0.00000183)	0.00138 B (0.00000098)	0.00039 B (0.000001)	0.000445 BC (0.0000421)	---
PCB-045 (2,2',3,6-TeCB)	0.00015 B (0.00000401)	0.000214 B (0.00000189)	0.000252 (0.00000212)	0.00035 (0.00000114)	0.00014 (0.0000012)	0.000165 BC (0.0000421)	---
PCB-046 (2,2',3,6'-TeCB)	0.0000513 (0.00000474)	0.0000819 (0.00000223)	0.0000922 (0.0000025)	0.000126 (0.00000134)	0.000056 (0.0000014)	0.0000585 (0.0000421)	---
PCB-047 (2,2',4,4'-TeCB)	0.000453 B (0.00000346)	0.00065 B (0.00000163)	0.000843 B (0.00000183)	0.00138 B (0.00000098)	0.00039 B (0.000001)	0.000445 BC44 (0.0000421)	---
PCB-048 (2,2',4,5-TeCB)	0.00007 (0.00000384)	0.000109 (0.0000018)	0.000132 (0.00000202)	0.000218 B (0.00000109)	0.000069 (0.0000011)	0.0000644 (0.0000421)	---
PCB-049 (2,2',4,5'-TeCB)	0.000275 (0.00000319)	0.000394 B (0.0000015)	0.000536 (0.00000168)	0.000915 B (0.000000903)	0.00025 B (0.00000093)	0.000254 BC (0.0000421)	---
PCB-050 (2,2',4,6-TeCB)	0.000145 (0.00000372)	0.000203 (0.00000175)	0.000239 (0.00000196)	0.000306 B (0.00000105)	0.00014 (0.0000011)	0.000164 C (0.0000421)	---
PCB-051 (2,2',4,6'-TeCB)	0.00015 B (0.00000401)	0.000214 B (0.00000189)	0.000252 (0.00000212)	0.00035 (0.00000114)	0.00014 (0.0000012)	0.000165 BC45 (0.0000421)	---
PCB-052 (2,2',5,5'-TeCB)	0.000538 (0.00000373)	0.000769 B (0.00000175)	0.00106 B (0.00000197)	0.00169 B (0.00000106)	0.00051 B (0.0000011)	---	---
PCB-053 (2,2',5,6'-TeCB)	0.000145 (0.00000372)	0.000203 (0.00000175)	0.000239 (0.00000196)	0.000306 B (0.00000105)	0.00014 (0.0000011)	0.000164 C50 (0.0000421)	---
PCB-054 (2,2',6,6'-TeCB)	U (0.00000359)	0.00000866 J (0.00000238)	0.00000679 J (0.00000213)	0.00000845 JQ (0.00000158)	0.0000062 JQ (0.0000016)	U (0.0000421)	---
PCB-055 (2,3,3',4-TeCB)	U (0.000003)	0.00000915 J (0.00000141)	0.00000677 EMPC J (0.00000158)	0.0000153 J (0.000000849)	0.000005 J (0.00000088)	U (0.0000421)	---
PCB-056 (2,3,3',4'-TeCB)	0.0000771 (0.00000282)	0.000128 B (0.00000133)	0.000158 (0.00000149)	0.000373 B (0.000000799)	0.000066 B (0.00000083)	0.0000655 (0.0000421)	---
PCB-057 (2,3,3',5-TeCB)	U (0.00000285)	0.00000269 EMPC J (0.00000134)	0.00000175 EMPC J (0.00000151)	UB (0.000000808)	U (0.00000084)	0.00000193 J (0.0000421)	---
PCB-058 (2,3,3',5'-TeCB)	U (0.00000284)	0.00000176 EMPC J (0.00000133)	0.00000137 EMPC J (0.0000015)	UB (0.000000804)	0.0000014 J (0.00000083)	U (0.0000421)	---
PCB-059 (2,3,3',6-TeCB)	0.0000298 J (0.00000276)	0.0000528 B (0.00000129)	0.0000564 (0.00000145)	0.000105 B (0.00000078)	0.00003 J (0.00000081)	0.0000278 J (0.0000421)	---
PCB-060 (2,3,4,4'-TeCB)	0.0000252 JQ (0.00000291)	0.0000539 (0.00000137)	0.0000695 (0.00000153)	0.000152 (0.000000823)	0.000029 J (0.00000085)	0.0000213 J (0.0000421)	---
PCB-061 (2,3,4,5-TeCB)	0.000313 B (0.00000275)	0.000496 B (0.00000129)	0.000651 B (0.00000145)	0.00152 B (0.00000078)	0.00027 B (0.00000081)	---	---
PCB-062 (2,3,4,6-TeCB)	0.0000298 J (0.00000276)	0.0000528 B (0.00000129)	0.0000564 (0.00000145)	0.000105 B (0.00000078)	0.00003 J (0.00000081)	0.0000278 J (0.0000421)	---
PCB-063 (2,3,4',5-TeCB)	0.00000644 JQ (0.00000265)	0.0000136 J (0.00000124)	0.0000135 J (0.0000014)	0.0000339 J (0.000000749)	0.0000058 J (0.00000077)	0.00000478 J (0.0000421)	---
PCB-064 (2,3,4',6-TeCB)	0.000128 (0.00000261)	0.00019 (0.00000123)	0.000232 (0.00000138)	0.000437 B (0.000000739)	0.00012 B (0.00000076)	0.000121 B (0.0000421)	---
PCB-065 (2,3,5,6-TeCB)	0.000453 B (0.00000346)	0.00065 B (0.00000163)	0.000843 B (0.00000183)	0.00138 B (0.00000098)	0.00039 B (0.000001)	0.000445 BC44 (0.0000421)	---
PCB-066 (2,3',4,4'-TeCB)	0.000167 (0.00000273)	0.000257 B (0.00000129)	0.000344 B (0.00000144)	0.000815 B (0.000000774)	0.00014 B (0.0000008)	0.000133 (0.0000421)	---
PCB-067 (2,3',4,5-TeCB)	U (0.00000257)	0.0000098 J (0.00000121)	0.00000977 J (0.00000135)	0.0000246 BJ (0.000000727)	0.0000047 EMPC J (0.00000075)	0.00000318 EMPC J (0.0000421)	---
PCB-068 (2,3',4,5'-TeCB)	UB (0.00000259)	UB (0.00000122)	0.0000074 BJ (0.00000136)	0.0000176 BJ (0.000000732)	UB (0.00000076)	0.00000368 B (0.0000421)	---
PCB-069 (2,3',4,6-TeCB)	0.000275 (0.00000319)	0.000394 B (0.0000015)	0.000536 (0.00000168)	0.000915 B (0.000000903)	0.00025 B (0.00000093)	0.000254 BC49 (0.0000421)	---
PCB-070 (2,3',4',5-TeCB)	0.000313 B (0.00000275)	0.000496 B (0.00000129)	0.000651 B (0.00000145)	0.00152 B (0.00000078)	0.00027 B (0.00000081)	0.000264 BC61 (0.0000421)	---
PCB-076 (2,3',4',5'-TeCB)	0.000313 B (0.00000275)	0.000496 B (0.00000129)	0.000651 B (0.00000145)	0.00152 B (0.00000078)	0.00027 B (0.00000081)	0.000264 BC61 (0.0000421)	---
PCB-071 (2,3',4',6-TeCB)	0.000202 (0.00000387)	0.000316 (0.00000182)	0.000374 (0.00000204)	0.000677 B (0.0000011)	0.00019 (0.0000011)	0.000208 C40 (0.0000421)	---
PCB-072 (2,3',5,5'-TeCB)	U (0.00000278)	0.00000843 J (0.0000013)	0.00000688 J (0.00000146)	0.0000199 J (0.000000786)	0.0000052 J (0.00000081)	0.0000031 EMPC J (0.0000421)	---
PCB-073 (2,3',5',6-TeCB)	0.0000153 J (0.00000362)	0.0000242 J (0.0000017)	0.000027 J (0.00000191)	0.0000371 BJ (0.00000102)	0.000011 J (0.0000011)	0.0000101 EMPC J (0.0000421)	---
PCB-074 (2,4,4',5-TeCB)	0.000313 B (0.00000275)	0.000496 B (0.00000129)	0.000651 B (0.00000145)	0.00152 B (0.00000078)	0.00027 B (0.00000081)	0.000264 BC61 (0.0000421)	---
PCB-075 (2,4,4',6-TeCB)	0.0000298 J (0.00000276)	0.0000528 B (0.00000129)	0.0000564 (0.00000145)	0.000105 B (0.00000078)	0.00003 J (0.00000081)	0.0000278 J (0.0000421)	---
PCB-077 (3,3',4,4'-TeCB)	0.00000705 J (0.00000268)	0.0000199 J (0.00000125)	0.000018 J (0.00000143)	0.000062 B (0.000000763)	0.0000068 J (0.00000078)	0.00000567 EMPC J (0.0000421)	---

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06	MB-MW-06
ENVIRON Sample ID	MB-MW-06-20100728	MB-MW-06-20101019	MB-MW-06-20110112	MB-MW-06-20110412	MB-MW-06-20110726	MB-MW-06-20111026	MB-MW-06-20120425
Sample Method	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge	Micropurge
Sample Date	7/28/2010	10/19/2010	1/12/2011	4/12/2011	7/26/2011	10/26/2011	4/25/2012
Comments							
PCB-078 (3,3',4,5-TeCB)	U (0.00000295)	U (0.00000139)	U (0.00000156)	U (0.000000835)	U (0.00000086)	U (0.0000421)	---
PCB-079 (3,3',4,5'-TeCB)	U (0.00000259)	0.00000416 EMPC J (0.00000122)	0.0000045 J (0.00000137)	0.00000939 J (0.000000733)	0.0000029 EMPC J (0.00000076)	U (0.0000421)	---
PCB-081 (3,4,4',5-TeCB)	U (0.00000267)	U (0.00000126)	U (0.00000139)	UB (0.000000751)	U (0.00000078)	U (0.0000421)	---
PCB-016 (2,2',3-TrCB)	0.000427 (0.0000056)	0.000507 (0.00000479)	0.000503 (0.00000275)	0.000544 B (0.00000165)	0.00039 (0.0000018)	0.00046 (0.0000421)	---
PCB-017 (2,2',4-TrCB)	0.000579 (0.00000467)	0.000677 (0.000004)	0.000736 (0.0000023)	0.000749 B (0.00000138)	0.0005 (0.0000015)	0.000569 (0.0000421)	---
PCB-018 (2,2',5-TrCB)	0.00114 (0.00000413)	0.00133 B (0.00000354)	0.00146 B (0.00000203)	0.00151 B (0.00000122)	0.0011 B (0.0000013)	0.00128 BC (0.0000632)	---
PCB-019 (2,2',6-TrCB)	0.000423 (0.00000572)	0.000441 (0.0000049)	0.000422 (0.00000281)	0.000397 (0.00000169)	0.00041 (0.0000018)	0.000443 (0.0000421)	---
PCB-020 (2,3,3'-TrCB)	0.000358 B (0.00000226)	0.000491 B (0.000000955)	0.000652 B (0.00000124)	0.0011 B (0.000000635)	0.00033 B (0.00000072)	0.000428 BC (0.0000421)	---
PCB-021 (2,3,4-TrCB)	0.000177 (0.00000227)	0.000236 B (0.000000957)	0.000314 B (0.00000125)	0.000489 B (0.000000637)	0.00016 B (0.00000073)	0.00021 BC (0.0000421)	---
PCB-022 (2,3,4'-TrCB)	0.000115 (0.0000023)	0.000156 B (0.000000973)	0.000194 B (0.00000127)	0.000316 B (0.000000647)	0.0001 B (0.00000074)	0.000129 EMPC (0.0000421)	---
PCB-023 (2,3,5-TrCB)	U (0.00000235)	U (0.00000992)	U (0.00000129)	UB (0.00000066)	U (0.00000075)	U (0.0000421)	---
PCB-024 (2,3,6-TrCB)	0.00000661 JQ (0.00000391)	0.0000159 EMPC J (0.00000335)	0.0000134 EMPC J (0.00000192)	0.0000173 J (0.00000115)	0.0000076 EMPC J (0.0000012)	---	---
PCB-025 (2,3',4-TrCB)	0.0000495 Q (0.0000021)	0.0000719 (0.000000885)	0.0000878 (0.00000115)	0.000139 B (0.000000588)	0.000053 (0.00000067)	0.0000631 (0.0000421)	---
PCB-026 (2,3',5-TrCB)	0.000114 (0.00000222)	0.000151 B (0.000000939)	0.000183 (0.00000122)	0.000277 B (0.000000624)	0.00011 B (0.00000071)	0.000134 C (0.0000421)	---
PCB-027 (2,3',6-TrCB)	0.000157 (0.00000338)	0.000179 (0.00000289)	0.000174 (0.00000166)	0.00019 (0.000000995)	0.00014 (0.0000011)	0.000156 (0.0000421)	---
PCB-028 (2,4,4'-TrCB)	0.000358 B (0.00000226)	0.000491 B (0.000000955)	0.000652 B (0.00000124)	0.0011 B (0.000000635)	0.00033 B (0.00000072)	0.000428 BC20 (0.0000421)	---
PCB-030 (2,4,6-TrCB)	0.00114 (0.00000413)	0.00133 B (0.00000354)	0.00146 B (0.00000203)	0.00151 B (0.00000122)	0.0011 B (0.0000013)	0.00128 BC18 (0.0000632)	---
PCB-029 (2,4,5-TrCB)	0.000114 (0.00000222)	0.000151 B (0.000000939)	0.000183 (0.00000122)	0.000277 B (0.000000624)	0.00011 B (0.00000071)	0.000134 C26 (0.0000421)	---
PCB-031 (2,4',5-TrCB)	0.000398 B (0.00000221)	0.000517 B (0.000000933)	0.000686 B (0.00000121)	0.00104 B (0.00000062)	0.00037 B (0.00000071)	0.000475 B (0.0000421)	---
PCB-032 (2,4',6-TrCB)	0.000377 (0.00000331)	0.00045 (0.00000283)	0.000505 (0.00000163)	0.000453 (0.000000975)	0.00033 (0.0000011)	0.000397 (0.0000421)	---
PCB-033 (2,3',4'-TrCB)	0.000177 (0.00000227)	0.000236 B (0.000000957)	0.000314 B (0.00000125)	0.000489 B (0.000000637)	0.00016 B (0.00000073)	0.00021 BC21 (0.0000421)	---
PCB-034 (2,3',5'-TrCB)	U (0.00000231)	0.00000553 EMPC J (0.000000977)	0.00000473 EMPC J (0.00000127)	0.0000121 BJ (0.000000649)	0.0000042 J (0.00000074)	0.00000402 EMPC J (0.0000421)	---
PCB-035 (3,3',4-TrCB)	U (0.00000238)	0.00000492 EMPC J (0.000001)	0.00000549 J (0.00000131)	UB (0.000000667)	0.0000029 EMPC J (0.00000076)	U (0.0000421)	---
PCB-036 (3,3',5-TrCB)	U (0.0000023)	U (0.00000097)	0.0000113 EMPC J (0.00000126)	UB (0.000000645)	U (0.00000074)	U (0.0000421)	---
PCB-037 (3,4,4'-TrCB)	0.000035 J (0.00000236)	0.0000588 B (0.000000995)	0.0000736 (0.0000013)	0.000202 B (0.000000662)	0.000035 J (0.00000076)	0.0000416 J (0.0000421)	---
PCB-038 (3,4,5-TrCB)	U (0.00000242)	U (0.00000102)	U (0.00000133)	UB (0.00000068)	U (0.00000078)	U (0.0000421)	---
PCB-039 (3,4',5-TrCB)	U (0.00000215)	0.00000524 EMPC J (0.00000091)	0.000000715 EMPC J (0.00000118)	UB (0.000000605)	0.0000026 J (0.00000069)	0.00000229 EMPC J (0.0000421)	---
PCB Aroclors							
PCBs (total)	U (0.00293)	U (0.00299)	U (0.00311)	U (0.0632)	U (0.0029)	U (0.55)	U (0.01)
Aroclor-1016	U (0.00252)	U (0.00257)	U (0.00267)	U (0.00262)	U (0.0025)	U (0.55)	U (0.01)
Aroclor-1242	U (0.00186)	U (0.00189)	U (0.00197)	U (0.00193)	U (0.0019)	U (0.55)	U (0.01)
Aroclor-1248	U (0.00227)	U (0.00232)	U (0.00241)	U (0.0283)	U (0.0023)	U (0.55)	U (0.01)
Aroclor-1260	U (0.00136)	U (0.00138)	U (0.00144)	U (0.00141)	U (0.0014)	U (0.55)	U (0.01)
Aroclor-1268	U (0.00272)	U (0.00277)	U (0.00288)	U (0.00283)	U (0.0027)	U (0.55)	U (0.01)
CDDF							
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	U (0.00000181)	---	0.00000434 J (0.00000059)	---	U (0.00000057)	---	---
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	U (0.00000143)	---	0.00000237 J (0.000000489)	---	U (0.00000054)	---	---
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	0.0000327 J (0.00000227)	---	0.000225 B (0.00000103)	---	0.00004 BJ (0.0000019)	---	---
Octachlorodibenzo-p-dioxin	0.00048 (0.00000281)	---	0.00352 B (0.0000013)	---	0.0007 J (0.0000033)	---	---
2,3,7,8-Tetrachlorodibenzo-p-dioxin	U (0.00000325)	---	0.000000382 BJ (0.000000394)	---	U (0.00000041)	---	---
1,2,3,7,8-Pentachlorodibenzofuran	U (0.00000122)	---	U (0.000000377)	---	U (0.00000052)	---	---
1,2,3,4,7,8-Hexachlorodibenzofuran	U (0.00000088)	---	UB (0.000000322)	---	U (0.00000054)	---	---
1,2,3,4,6,7,8-Heptachlorodibenzofuran	0.00000749 J (0.0000011)	---	0.0000358 BJ (0.00000036)	---	0.0000097 BJ (0.00000087)	---	---
Octachlorodibenzofuran	0.000026 J (0.00000205)	---	0.000273 B (0.000000599)	---	0.00008 BJ (0.0000012)	---	---

Notes:
1 All concentrations are presented in ug/L (ppb).
2 Only compounds with at least one detection are shown.

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-06	MB-MW-06	MB-MW-06
ENVIRON Sample ID	MB-MW-06-20121018	MB-MW-06-20130411	MB-MW-06-20131010
Sample Method	Micropurge	Micropurge	Micropurge
Sample Date	10/18/2012	4/11/2013	10/10/2013
Comments			
SVOC			
Acenaphthene	2.2 J (2.3)	U (2.3)	1.7 J (1.9)
Acenaphthylene	U (2.3)	U (2.3)	U (1.9)
Acetophenone	U (11)	U (11)	U (9.7)
Anthracene	0.24 J (2.3)	0.46 J (2.3)	U (1.9)
Benzaldehyde	U (11)	U (11)	U (9.7)
Benzo(a)anthracene	U (2.3)	U (2.3)	U (1.9)
Benzo(a)pyrene	U (2.3)	U (2.3)	U (1.9)
Benzo(b)fluoranthene	U (2.3)	U (2.3)	U (1.9)
Benzo(g,h,i)perylene	U (2.3)	U (2.3)	U (1.9)
Benzo(k)fluoranthene	U (2.3)	U (2.3)	U (1.9)
Biphenyl	U (11)	U (11)	U (9.7)
bis(2-Chloroethyl) ether	U (2.3)	U (2.3)	U (1.9)
bis(2-Ethylhexyl)phthalate	U (23)	U (23)	U (19)
Butylbenzylphthalate	U (11)	U (11)	U (9.7)
Caprolactam	U (57)	U (57)	U (49)
Carbazole	U (2.3)	U (2.3)	U (1.9)
4-Chloroaniline	U (11)	U (11)	U (9.7)
2-Chlorophenol	U (11)	U (11)	U (9.7)
4-Chlorophenyl-phenyl ether	U (11)	U (11)	U (9.7)
Chrysene	U (2.3)	U (2.3)	U (1.9)
Dibenz(a,h)anthracene	U (2.3)	U (2.3)	U (1.9)
Dibenzofuran	U (11)	U (11)	U (9.7)
2,4-Dichlorophenol	U (2.3)	U (2.3)	U (1.9)
Diethylphthalate	U (11)	U (11)	U (9.7)
2,4-Dimethylphenol	U (11)	U (11)	U (9.7)
Dimethylphthalate	U (11)	U (11)	U (9.7)
Di-n-butylphthalate	U (11)	U (11)	U (9.7)
Di-n-octylphthalate	U (11)	U (11)	U (9.7)
Fluoranthene	0.25 J (2.3)	0.3 J (2.3)	U (1.9)
Fluorene	U (2.3)	U (2.3)	U (1.9)
Indeno(1,2,3-cd)pyrene	U (2.3)	U (2.3)	U (1.9)
Isophorone	U (11)	U (11)	U (9.7)
2-Methylnaphthalene	U (2.3)	U (2.3)	U (1.9)
2-Methylphenol	U (11)	U (11)	U (9.7)
3&4-Methylphenol	U (11)	U (11)	U (9.7)
4-Methylphenol	---	---	---
Naphthalene	U (2.3)	U (2.3)	U (1.9)
N-Nitrosodiphenylamine	U (11)	U (11)	U (9.7)
Pentachlorophenol	U (11)	U (11)	U (9.7)
Phenanthrene	U (2.3)	U (2.3)	U (1.9)
Phenol	U (2.3)	U (2.3)	U (1.9)
Pyrene	0.29 J (2.3)	U (2.3)	U (1.9)
PCB Congeners			
13C12-PCB 114	---	---	---
PCB-001 (2-CB)	---	---	---
PCB-002 (3-CB)	---	---	---
PCB-003 (4-CB)	---	---	---

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-06	MB-MW-06	MB-MW-06
ENVIRON Sample ID	MB-MW-06-20121018	MB-MW-06-20130411	MB-MW-06-20131010
Sample Method	Micropurge	Micropurge	Micropurge
Sample Date	10/18/2012	4/11/2013	10/10/2013
Comments			
PCB-209 (DeCB)	---	---	---
PCB-004 (2,2'-DiCB)	---	---	---
PCB-005 (2,3-DiCB)	---	---	---
PCB-006 (2,3'-DiCB)	---	---	---
PCB-007 (2,4-DiCB)	---	---	---
PCB-008 (2,4'-DiCB)	---	---	---
PCB-009 (2,5-DiCB)	---	---	---
PCB-010 (2,6-DiCB)	---	---	---
PCB-011 (3,3'-DiCB)	---	---	---
PCB-012 (3,4-DiCB)	---	---	---
PCB-013 (3,4'-DiCB)	---	---	---
PCB-014 (3,5-DiCB)	---	---	---
PCB-015 (4,4'-DiCB)	---	---	---
PCB-170 (2,2',3,3',4,4',5-HpCB)	---	---	---
PCB-171 (2,2',3,3',4,4',6-HpCB)	---	---	---
PCB-172 (2,2',3,3',4,5,5'-HpCB)	---	---	---
PCB-173 (2,2',3,3',4,5,6-HpCB)	---	---	---
PCB-174 (2,2',3,3',4,5,6'-HpCB)	---	---	---
PCB-175 (2,2',3,3',4,5',6-HpCB)	---	---	---
PCB-177 (2,2',3,3',4,5',6'-HpCB)	---	---	---
PCB-176 (2,2',3,3',4,6,6'-HpCB)	---	---	---
PCB-178 (2,2',3,3',5,5',6-HpCB)	---	---	---
PCB-179 (2,2',3,3',5,6,6'-HpCB)	---	---	---
PCB-180 (2,2',3,4,4',5,5'-HpCB)	---	---	---
PCB-181 (2,2',3,4,4',5,6-HpCB)	---	---	---
PCB-182 (2,2',3,4,4',5,6'-HpCB)	---	---	---
PCB-183 (2,2',3,4,4',5',6-HpCB)	---	---	---
PCB-185 (2,2',3,4,5,5',6-HpCB)	---	---	---
PCB-187 (2,2',3,4',5,5',6-HpCB)	---	---	---
PCB-188 (2,2',3,4',5,6,6'-HpCB)	---	---	---
PCB-189 (2,3,3',4,4',5,5'-HpCB)	---	---	---
PCB-190 (2,3,3',4,4',5,6-HpCB)	---	---	---
PCB-191 (2,3,3',4,4',5',6-HpCB)	---	---	---
PCB-193 (2,3,3',4',5,5',6-HpCB)	---	---	---
PCB-128 (2,2',3,3',4,4'-HxCB)	---	---	---
PCB-129 (2,2',3,3',4,5-HxCB)	---	---	---
PCB-130 (2,2',3,3',4,5'-HxCB)	---	---	---
PCB-131 (2,2',3,3',4,6-HxCB)	---	---	---
PCB-132 (2,2',3,3',4,6'-HxCB)	---	---	---
PCB-133 (2,2',3,3',5,5'-HxCB)	---	---	---
PCB-134 (2,2',3,3',5,6-HxCB)	---	---	---
PCB-135 (2,2',3,3',5,6'-HxCB)	---	---	---
PCB-136 (2,2',3,3',6,6'-HxCB)	---	---	---
PCB-137 (2,2',3,4,4',5-HxCB)	---	---	---
PCB-138 (2,2',3,4,4',5'-HxCB)	---	---	---
PCB-139 (2,2',3,4,4',6-HxCB)	---	---	---
PCB-140 (2,2',3,4,4',6'-HxCB)	---	---	---
PCB-141 (2,2',3,4,5,5'-HxCB)	---	---	---
PCB-143 (2,2',3,4,5,6'-HxCB)	---	---	---
PCB-144 (2,2',3,4,5',6-HxCB)	---	---	---
PCB-146 (2,2',3,4',5,5'-HxCB)	---	---	---
PCB-147 (2,2',3,4',5,6-HxCB)	---	---	---
PCB-148 (2,2',3,4',5,6'-HxCB)	---	---	---
PCB-149 (2,2',3,4',5',6-HxCB)	---	---	---
PCB-150 (2,2',3,4',6,6'-HxCB)	---	---	---
PCB-151 (2,2',3,5,5',6-HxCB)	---	---	---
PCB-152 (2,2',3,5,6,6'-HxCB)	---	---	---
PCB-153 (2,2',4,4',5,5'-HxCB)	---	---	---

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-06	MB-MW-06	MB-MW-06
ENVIRON Sample ID	MB-MW-06-20121018	MB-MW-06-20130411	MB-MW-06-20131010
Sample Method	Micropurge	Micropurge	Micropurge
Sample Date	10/18/2012	4/11/2013	10/10/2013
Comments			
PCB-154 (2,2',4,4',5,6'-HxCB)	---	---	---
PCB-155 (2,2',4,4',6,6'-HxCB)	---	---	---
PCB-156 (2,3,3',4,4',5-HxCB)	---	---	---
PCB-157 (2,3,3',4,4',5'-HxCB)	---	---	---
PCB-158 (2,3,3',4,4',6-HxCB)	---	---	---
PCB-159 (2,3,3',4,5,5'-HxCB)	---	---	---
PCB-160 (2,3,3',4,5,6-HxCB)	---	---	---
PCB-162 (2,3,3',4',5,5'-HxCB)	---	---	---
PCB-163 (2,3,3',4',5,6-HxCB)	---	---	---
PCB-164 (2,3,3',4',5',6-HxCB)	---	---	---
PCB-166 (2,3,4,4',5,6-HxCB)	---	---	---
PCB-167 (2,3',4,4',5,5'-HxCB)	---	---	---
PCB-168 (2,3',4,4',5',6-HxCB)	---	---	---
PCB-169 (3,3',4,4',5,5'-HxCB)	---	---	---
PCB-206 (2,2',3,3',4,4',5,5',6-NoCB)	---	---	---
PCB-207 (2,2',3,3',4,4',5,6,6'-NoCB)	---	---	---
PCB-208 (2,2',3,3',4,5,5',6,6'-NoCB)	---	---	---
PCB-194 (2,2',3,3',4,4',5,5'-OcCB)	---	---	---
PCB-195 (2,2',3,3',4,4',5,6-OcCB)	---	---	---
PCB-196 (2,2',3,3',4,4',5,6'-OcCB)	---	---	---
PCB-197 (2,2',3,3',4,4',6,6'-OcCB)	---	---	---
PCB-198 (2,2',3,3',4,5,5',6-OcCB)	---	---	---
PCB-199 (2,2',3,3',4,5,5',6'-OcCB)	---	---	---
PCB-200 (2,2',3,3',4,5,6,6'-OcCB)	---	---	---
PCB-201 (2,2',3,3',4,5',6,6'-OcCB)	---	---	---
PCB-202 (2,2',3,3',5,5',6,6'-OcCB)	---	---	---
PCB-203 (2,2',3,4,4',5,5',6-OcCB)	---	---	---
PCB-204 (2,2',3,4,4',5,6,6'-OcCB)	---	---	---
PCB-205 (2,3,3',4,4',5,5',6-OcCB)	---	---	---
PCB-24/27	---	---	---
PCB-42/59	---	---	---
PCB-52/69	---	---	---
PCB-61/70	---	---	---
PCB-90/101	---	---	---
PCB-107/109	---	---	---
PCB-132/161	---	---	---
PCB-133/142	---	---	---
PCB-138/163/164	---	---	---
PCB-196/203	---	---	---
PCB-082 (2,2',3,3',4-PeCB)	---	---	---
PCB-083 (2,2',3,3',5-PeCB)	---	---	---
PCB-084 (2,2',3,3',6-PeCB)	---	---	---
PCB-085 (2,2',3,4,4'-PeCB)	---	---	---
PCB-086 (2,2',3,4,5-PeCB)	---	---	---
PCB-087 (2,2',3,4,5'-PeCB)	---	---	---
PCB-088 (2,2',3,4,6-PeCB)	---	---	---
PCB-089 (2,2',3,4,6'-PeCB)	---	---	---
PCB-090 (2,2',3,4',5-PeCB)	---	---	---
PCB-097 (2,2',3,4',5'-PeCB)	---	---	---
PCB-091 (2,2',3,4',6-PeCB)	---	---	---
PCB-098 (2,2',3,4',6'-PeCB)	---	---	---
PCB-092 (2,2',3,5,5'-PeCB)	---	---	---
PCB-093 (2,2',3,5,6-PeCB)	---	---	---
PCB-094 (2,2',3,5,6'-PeCB)	---	---	---
PCB-095 (2,2',3,5',6-PeCB)	---	---	---
PCB-096 (2,2',3,6,6'-PeCB)	---	---	---
PCB-099 (2,2',4,4',5-PeCB)	---	---	---
PCB-100 (2,2',4,4',6-PeCB)	---	---	---
PCB-101 (2,2',4,5,5'-PeCB)	---	---	---
PCB-102 (2,2',4,5,6'-PeCB)	---	---	---

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-06	MB-MW-06	MB-MW-06
ENVIRON Sample ID	MB-MW-06-20121018	MB-MW-06-20130411	MB-MW-06-20131010
Sample Method	Micropurge	Micropurge	Micropurge
Sample Date	10/18/2012	4/11/2013	10/10/2013
Comments			
PCB-103 (2,2',4,5',6-PeCB)	---	---	---
PCB-104 (2,2',4,6,6'-PeCB)	---	---	---
PCB-105 (2,3,3',4,4'-PeCB)	---	---	---
PCB-108 (2,3,3',4,5'-PeCB)	---	---	---
PCB-109 (2,3,3',4,6-PeCB)	---	---	---
PCB-107 (2,3,3',4',5-PeCB)	---	---	---
PCB-110 (2,3,3',4',6-PeCB)	---	---	---
PCB-111 (2,3,3',5,5'-PeCB)	---	---	---
PCB-113 (2,3,3',5',6-PeCB)	---	---	---
PCB-114 (2,3,4,4',5-PeCB)	---	---	---
PCB-115 (2,3,4,4',6-PeCB)	---	---	---
PCB-116 (2,3,4,5,6-PeCB)	---	---	---
PCB-117 (2,3,4',5,6-PeCB)	---	---	---
PCB-118 (2,3',4,4',5-PeCB)	---	---	---
PCB-119 (2,3',4,4',6-PeCB)	---	---	---
PCB-120 (2,3',4,5,5'-PeCB)	---	---	---
PCB-121 (2,3',4,5',6-PeCB)	---	---	---
PCB-122 (2,3,3',4',5'-PeCB)	---	---	---
PCB-123 (2,3',4,4',5'-PeCB)	---	---	---
PCB-124 (2,3',4',5,5'-PeCB)	---	---	---
PCB-125 (2,3',4',5',6-PeCB)	---	---	---
PCB-126 (3,3',4,4',5-PeCB)	---	---	---
PCB-127 (3,3',4,5,5'-PeCB)	---	---	---
PCB-040 (2,2',3,3'-TeCB)	---	---	---
PCB-041 (2,2',3,4-TeCB)	---	---	---
PCB-042 (2,2',3,4'-TeCB)	---	---	---
PCB-043 (2,2',3,5-TeCB)	---	---	---
PCB-044 (2,2',3,5'-TeCB)	---	---	---
PCB-045 (2,2',3,6-TeCB)	---	---	---
PCB-046 (2,2',3,6'-TeCB)	---	---	---
PCB-047 (2,2',4,4'-TeCB)	---	---	---
PCB-048 (2,2',4,5-TeCB)	---	---	---
PCB-049 (2,2',4,5'-TeCB)	---	---	---
PCB-050 (2,2',4,6-TeCB)	---	---	---
PCB-051 (2,2',4,6'-TeCB)	---	---	---
PCB-052 (2,2',5,5'-TeCB)	---	---	---
PCB-053 (2,2',5,6'-TeCB)	---	---	---
PCB-054 (2,2',6,6'-TeCB)	---	---	---
PCB-055 (2,3,3',4-TeCB)	---	---	---
PCB-056 (2,3,3',4'-TeCB)	---	---	---
PCB-057 (2,3,3',5-TeCB)	---	---	---
PCB-058 (2,3,3',5'-TeCB)	---	---	---
PCB-059 (2,3,3',6-TeCB)	---	---	---
PCB-060 (2,3,4,4'-TeCB)	---	---	---
PCB-061 (2,3,4,5-TeCB)	---	---	---
PCB-062 (2,3,4,6-TeCB)	---	---	---
PCB-063 (2,3,4',5-TeCB)	---	---	---
PCB-064 (2,3,4',6-TeCB)	---	---	---
PCB-065 (2,3,5,6-TeCB)	---	---	---
PCB-066 (2,3',4,4'-TeCB)	---	---	---
PCB-067 (2,3',4,5-TeCB)	---	---	---
PCB-068 (2,3',4,5'-TeCB)	---	---	---
PCB-069 (2,3',4,6-TeCB)	---	---	---
PCB-070 (2,3',4',5-TeCB)	---	---	---
PCB-076 (2,3',4',5'-TeCB)	---	---	---
PCB-071 (2,3',4',6-TeCB)	---	---	---
PCB-072 (2,3',5,5'-TeCB)	---	---	---
PCB-073 (2,3',5',6-TeCB)	---	---	---
PCB-074 (2,4,4',5-TeCB)	---	---	---
PCB-075 (2,4,4',6-TeCB)	---	---	---
PCB-077 (3,3',4,4'-TeCB)	---	---	---

TABLE 2-4
Summary of Groundwater Sampling Results
Metal Bank Superfund Site; Philadelphia, PA

Location	MB-MW-06	MB-MW-06	MB-MW-06
ENVIRON Sample ID	MB-MW-06-20121018	MB-MW-06-20130411	MB-MW-06-20131010
Sample Method	Micropurge	Micropurge	Micropurge
Sample Date	10/18/2012	4/11/2013	10/10/2013
Comments			
PCB-078 (3,3',4,5-TeCB)	---	---	---
PCB-079 (3,3',4,5'-TeCB)	---	---	---
PCB-081 (3,4,4',5-TeCB)	---	---	---
PCB-016 (2,2',3-TrCB)	---	---	---
PCB-017 (2,2',4-TrCB)	---	---	---
PCB-018 (2,2',5-TrCB)	---	---	---
PCB-019 (2,2',6-TrCB)	---	---	---
PCB-020 (2,3,3'-TrCB)	---	---	---
PCB-021 (2,3,4-TrCB)	---	---	---
PCB-022 (2,3,4'-TrCB)	---	---	---
PCB-023 (2,3,5-TrCB)	---	---	---
PCB-024 (2,3,6-TrCB)	---	---	---
PCB-025 (2,3',4-TrCB)	---	---	---
PCB-026 (2,3',5-TrCB)	---	---	---
PCB-027 (2,3',6-TrCB)	---	---	---
PCB-028 (2,4,4'-TrCB)	---	---	---
PCB-030 (2,4,6-TrCB)	---	---	---
PCB-029 (2,4,5-TrCB)	---	---	---
PCB-031 (2,4',5-TrCB)	---	---	---
PCB-032 (2,4',6-TrCB)	---	---	---
PCB-033 (2,3',4'-TrCB)	---	---	---
PCB-034 (2,3',5'-TrCB)	---	---	---
PCB-035 (3,3',4-TrCB)	---	---	---
PCB-036 (3,3',5-TrCB)	---	---	---
PCB-037 (3,4,4'-TrCB)	---	---	---
PCB-038 (3,4,5-TrCB)	---	---	---
PCB-039 (3,4',5-TrCB)	---	---	---
PCB Aroclors			
PCBs (total)	U (0.011)	U (0.011)	0.015 (0.0094)
Aroclor-1016	U (0.011)	U (0.011)	U (0.0094)
Aroclor-1242	U (0.011)	U (0.011)	0.015 (0.0094)
Aroclor-1248	U (0.011)	U (0.011)	U (0.0094)
Aroclor-1260	U (0.011)	U (0.011)	U (0.0094)
Aroclor-1268	U (0.011)	U (0.011)	U (0.0094)
CDDF			
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	---	---	---
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	---	---	---
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	---	---	---
Octachlorodibenzo-p-dioxin	---	---	---
2,3,7,8-Tetrachlorodibenzo-p-dioxin	---	---	---
1,2,3,7,8-Pentachlorodibenzofuran	---	---	---
1,2,3,4,7,8-Hexachlorodibenzofuran	---	---	---
1,2,3,4,6,7,8-Heptachlorodibenzofuran	---	---	---
Octachlorodibenzofuran	---	---	---

Notes:
1 All concentrations are presented in ug/L (ppb).
2 Only compounds with at least one detection are shown.

Appendix C

Groundwater Elevation Data

Appendix C - Groundwater Elevation Measurements
Metal Bank NPL Site
Philadelphia, PA

Location	MW01	MW02	MW03	MW04	MW05	MW06
Easting	2730543.852	2730838.03	2730721.051	2730876.66	2731000.932	2731240.061
Northing	262719.2239	262906.8981	262391.7063	262183.9852	262319.0302	262324.6254
Top of Casing Elevation	18.00	17.34	16.87	17.12	19.55	18.79
Date	Groundwater Elevations					
7/26/2010	3.00	8.50	2.82	2.72	1.64	2.38
10/18/2010	3.02	7.76	2.79	2.91	2.78	1.28
1/11/2011	2.22	6.65	2.21	2.01	1.98	1.76
4/11/2011	2.77	7.91	3.05	2.90	3.32	2.21
7/25/2011	3.11	7.24	3.02	2.88	2.13	2.51
10/26/2011	3.54	8.36	3.57	3.41	3.34	2.18
4/24/2012	3.28	6.89	2.79	2.51	2.42	2.60
10/17/2012	2.52	6.90	2.55	2.38	2.33	2.12
4/10/2013	2.75	7.11	3.17	3.07	2.91	2.28
10/9/2013	2.71	7.00	2.87	2.74	2.69	2.47

Notes:
Vertical datum is the North American Vertical Datum 1988 (NAVD 88) in feet above mean sea level
Horizontal datum is Pennsylvania State Plane South, North American Datum 1983 (NAD 83) in feet
Top of casing elevations are as represented in Figure 2 of the 2013 Annual Report and have been updated from previous annual reports.

ENVIRON

DRAFTED BY: TSP | DATE: 02/1/201

GROUNDWATER ELEVATION CONTOURS - APRIL 2013

METAL BAN SUPERFUND SITE
PHILADELPHIA, PA

FIGURE
A

333150N

TPENNIS\ 2/21/14 [GW-APRIL 2013_3331508]
F:\3331508

SOURCE:
1. Google Earth™ MAPPING SERVICE

N□TES:

1□ VERTICAL DATUM IS THE N□RTH AMERICAN VERTICAL DATUM 1□□□ □NAVD □□□IN FEET AB□VE MEAN SEA LEVEL

2□ H□RI□□NTAL DATUM IS PENNSYLVANIA STATE PLANE S□UTH, N□RTH AMERICAN DATUM 1□□3 □NAD □3□IN FEET

ENVIRON

DRAFTED BY: TSP | DATE: 02/1□/201□

GROUNDWATER ELEVATION CONTOURS - OCTOBER 2013

METAL BAN□ SUPERFUND SITE
PHILADELPHIA, PA

FIGURE
B

333150□N

TPENNISI 2/21/14 [GW-OCTOBER 2013_3331508]
F:\3331508

Appendix D

LNAPL Trench Monitoring Results

Appendix D - LNAPL Sump Measurements
Metal Bank NPL Site
Philadelphia, PA

	Sump 1 Top of Concrete = 14.25 Approx. MP adjustment* = 4		Sump 2 Top of Concrete = 14.61 Approx. MP adjustment* = 4		Sump 3 Top of Concrete = 14.41 Approx. MP adjustment* = 4		Sump 4 Top of Concrete = 15.42 Approx. MP adjustment* = 4		Sump 5 Top of Concrete = 15.40 Approx. MP adjustment* = 4	
Date	**GW Elevation**	**Product Thickness**	**GW Elevation**	**Product Thickness**	**GW Elevation**	**Product Thickness**	**GW Elevation**	**Product Thickness**	**GW Elevation**	**Product Thickness**
3/31/2010	1.85	0	2.46	0	1.41	0	2.42	0	2.25	0
4/14/2010	1.45	0	1.71	0	1.81	0	2.02	0	1.80	0
4/28/2010	1.55	0	1.81	0	1.91	0	2.12	0	1.90	0
5/12/2010	1.15	0	1.41	0	1.51	0	1.72	0	1.50	0
5/27/2010	1.05	0	1.41	0	1.41	0	1.62	0	1.40	0
6/9/2010	1.05	0	1.31	0	1.31	0	1.52	0	1.40	0
6/23/2010	1.05	0	1.31	0	1.41	0	1.62	0	1.40	0
7/7/2010	0.85	0	1.11	0	1.11	0	1.42	0	1.20	0
11/11/2010	0.90	0	1.16	0	1.21	0	1.47	0	1.25	0
1/10/2011	0.57	0	0.89	0	1.21	0	1.47	0	1.25	0
4/11/2011	1.34	0	1.58	0	1.58	0	1.81	0	1.57	0
7/25/2011	1.25	0	1.56	0	1.57	0	1.78	0	1.57	0
10/26/2011	1.93	0	2.18	0	2.01	0	2.27	0	2.07	0
1/13/2012	0.96	0	0.23	0	0.30	0	0.33	0	0.26	0
4/25/2012	1.17	0	1.30	0	1.13	0	1.41	0	1.21	0
7/17/2012	1.07	0	1.39	0	1.24	0	1.57	0	1.32	0
10/18/2012	0.90	0	1.16	0	1.18	0	1.29	0	1.14	0
1/25/2013	1.55	0	1.76	0	1.70	0	1.93	0	1.78	0
4/11/2013	1.56	0	1.82	0	1.65	0	1.93	0	1.73	0
7/23/2013	1.96	0	--	0	1.83	0	2.05	0	1.82	0
10/9/2013	1.25	0	1.49	0	1.45	0	0.66	0	1.41	0

Notes:
All measurements are presented in feet above mean sea level.
SLCPP - Smooth Lined Corrugated Plastic Pipe
*Previous reported versions of this table prior to the 2012 Annual Report contained a mathematical error. Specifically, the groundwater depth measurements were taken rom the top of corrugated pipe (MP), but the elevations of the top of the concrete vaults were used to convert these depth measurements to groundwater elevations. Surveying the elevation of the top of the corrugated pipes was not completed before the submittal deadline of the 2013 Annual Report, so we have used an approximated elevation adjustment of 4 feet to estimate the groundwater elevations in the LNAPL trench sumps. As a result, groundwater elevation data presented here should still be viewed as approximate. An elevation survey of the LNAPL trench measuring points will be conducted in the first quarter of 2014.

Appendix E

Site Inspection Reports

Metal Bank Superfund Site
Site Inspection Log
7301 Cottman Avenue
Philadelphia, Pennsylvania

Date: 1/15/13 Name: M. Charles and E. Mayfield

Weather Conditions: Overcast, cold, 17° F

General Inspection:

(Y/N)

Is the Milnor Street entrance secure? Y

Is the Cottman Ave. entrance secure? Y

Are there any breaches in site security in the site gate/fence? N

If Yes, describe in detail below and mark on the attached site map.

Site sign remains in good condition? Y

Building 7:

Are the doors to Building 7 locked? Y

Has security for Building 7 been breached? N

Is the high visibility fence and welded wire still in place at the front door? Y

Comments:

Some cracks were noted in the epoxy floor, but no holes.

Southern Area:

Sheet Pile Wall remains in good conditions? Y

Comments:

Are the fish warning signs still hanging? Y

Additional Notes or Comments:

Metal Bank Superfund Site
Site Inspection Log
7301 Cottman Avenue
Philadelphia, Pennsylvania

Date: 1/15/13 Name: M. Charles and E. Mayfield

Weather Conditions: Overcast, cold, 17° F

Metal Bank Superfund Site
Site Inspection Log
7301 Cottman Avenue
Philadelphia, Pennsylvania

Date: 1/15/13 Name: M. Charles and E. Mayfield

Weather Conditions: Overcast, cold, 17° F

Additional Notes:

No LNAPL was observed in the LNAPL monitoring trenches.

Debris from Revolution Recovery (mainly wood chips) has fallen over the wall in the northern corner.

There is minimal vegetation growth in the Southern portion of the property.

There is moderate vegetation growth in the Courtyard Area, along Milnor Street.

Photo 1: The floor in Building 7 is in good condition. Some cracks were found but no holes in the epoxy.

Photo 2: There is moderate vegetation growth in the Courtyard Area, along Milnor Street.

Title:	Site Inspection Log	ENVIRON
Site:	Metal Bank Superfund Site	Date: January 15, 2013

Photo 3: There is moderate vegetation growth in the Courtyard Area north of Building 7.

Photo 4: There is minimal vegetation growth in the vicinity of the Northeast fence line in the Southern portion of the property.

Photo 5: Debris from Revolution Recovery has fallen over the wall.

Photo 6: Debris from Revolution Recovery has fallen over the wall.

Metal Bank Superfund Site
Site Inspection Log
7301 Cottman Avenue
Philadelphia, Pennsylvania

Date: 4/11/13 Name: M. Charles, E. Mayfield

Weather Conditions: 61° F, Sunny

General Inspection:

(Y/N)

Is the Milnor Street entrance secure? Y

Is the Cottman Ave. entrance secure? Y

Are there any breaches in site security in the site gate/fence? N

If Yes, describe in detail below and mark on the attached site map.

Site sign remains in good condition? Y

Building 7:

Are the doors to Building 7 locked? Y

Has security for Building 7 been breached? N

Is the high visibility fence and welded wire still in place at the front door? Y

Comments:

Some cracks were noted in the epoxy floor, but no holes.

Southern Area:

Sheet Pile Wall remains in good conditions? Y

Comments:

Are the fish warning signs still hanging? Y

Additional Notes or Comments:

Metal Bank Superfund Site
Site Inspection Log
7301 Cottman Avenue
Philadelphia, Pennsylvania

Date: ___4/11/13_____Name: ___M. Charles, E. Mayfield__

Weather Conditions: ___61° F, Sunny_____

Additional Notes:

No LNAPL was observed in the LNAPL monitoring trenches.

Debris from Revolution Recovery has fallen over the wall.

There is minimal to moderate vegetation growth in the Southern portion of the property.

There is moderate vegetation growth in the Courtyard Area, along Milnor Street.

Photo 1: The floor in Building 7 is in good condition. Some cracks were found but no holes in the epoxy.

Photo 2: The floor in Building 7 is in good condition. Some cracks were found but no holes in the epoxy.

Title:	Site Inspection Log	ENVIRON
Site:	Metal Bank Superfund Site	Date: April 11, 2013

Photo 3: The high visibility fencing within Building 7 is intact.

Photo 4: There is moderate growth in the Courtyard Area, along Milnor Street.

Photo 5: Debris (mainly wood pallet chips) from Revolution Recovery has fallen over the wall.

Photo 6: Debris (mainly wood pallet chips) from Revolution Recovery has fallen over the wall.

Photo 7: There is minimal to moderate vegetation growth along the Northeast fence line in the Southern portion of the property.

Photo 8: There is minimal to moderate growth in the vicinity of the Northeast fence line in the Southern portion of the property.

Metal Bank Superfund Site
Site Inspection Log
7301 Cottman Avenue
Philadelphia, Pennsylvania

Date: 7/23/13 Name: M. Charles

Weather Conditions: 85° F, Sunny

General Inspection:

(Y/N)

Is the Milnor Street entrance secure? Y

Is the Cottman Ave. entrance secure? Y

Are there any breaches in site security in the site gate/fence? N

If Yes, describe in detail below and mark on the attached site map.

Site sign remains in good condition? Y

Building 7:

Are the doors to Building 7 locked? Y

Has security for Building 7 been breached? N

Is the high visibility fence and welded wire still in place at the front door? Y

Comments:

Some cracks were noted in the epoxy floor, but no holes.

Southern Area:

Sheet Pile Wall remains in good conditions? Y

Comments:

Are the fish warning signs still hanging? Y

Additional Notes or Comments:

Metal Bank Superfund Site
Site Inspection Log
7301 Cottman Avenue
Philadelphia, Pennsylvania

Date: ___7/23/13_____Name: ___M. Charles __

Weather Conditions: ___85° F, Sunny _____

Additional Notes:

No LNAPL was observed in the LNAPL monitoring trenches.

Debris from Revolution Recovery has fallen over the wall.

There is good vegetation growth in the Southern portion of the property.

There is good vegetation growth in the Courtyard Area, along Milnor Street.

There is good vegetation growth along the riprap swale.

Photo 1: Flooding was observed throughout the Northern side Building 7.

Photo 2: Flooding was observed throughout the Southern side Building 7.

Title:	Site Inspection Log	ENVIRON
Site:	Metal Bank Superfund Site	Date: July 23, 2013

Photo 3: The high visibility fence along the Western side of Building 7 is damaged or breached in multiple places.

Photo 4: The vegetation growth is good in the vicinity of the riprap swale. No sediment was observed in the outfalls.

Photo 5: The vegetation is growing well along the Southern part of the property, adjacent to the Delaware River.

Photo 6: The vegetation is growing well along the Northern property boundary, adjacent to Revolution Recovery.

Photo 7: The vegetation is growing well in the area North of Building 7.

Photo 8: The vegetation is growing well within the Courtyard Area, Northwest of Building 7.

Title:	Site Inspection Log	ENVIRON
Site:	Metal Bank Superfund Site	Date: July 23, 2013

Metal Bank Superfund Site
Site Inspection Log
7301 Cottman Avenue
Philadelphia, Pennsylvania

Date: 10/9/13 Name: M. McConnell and E. Mayfield

Weather Conditions: low 60s partly cloudy

General Inspection:

	(Y/N)
Is the Milnor Street entrance secure?	Y
Is the Cottman Ave. entrance secure?	Y
Are there any breaches in site security in the site gate/fence?	Y

If Yes, describe in detail below and mark on the attached site map.

Two holes in the fence have been found. Holes have been patched by a fence contractor and no longer present a security issue.

Site sign remains in good condition?	Y

Building 7:

Are the doors to Building 7 locked?	Y
Has security for Building 7 been breached?	N
Is the high visibility fence and welded wire still in place at the front door?	Y

Comments:

Some cracks were noted in the epoxy floor, but no holes.

Southern Area:

Sheet Pile Wall remains in good conditions?	Y

Comments:

Are the fish warning signs still hanging?	Y

Additional Notes or Comments:

Site Inspection Log
7301 Cottman Avenue
Philadelphia, Pennsylvania

Date: ___10/9/13_____Name: ___M. McConnell and E. Mayfield

Weather Conditions: ___low 60s partly cloudy_____

Additional Notes:

No LNAPL was observed in the LNAPL monitoring trenches.

Debris from Revolution Recovery has fallen over the wall.

There is good vegetation growth in the Southern portion of the property.

There is good vegetation growth in the Courtyard Area, along Milnor Street.

Photo 1: The floor in Building 7 is in good condition. Some cracks were found but no holes in the epoxy.

Photo 2: The floor in Building 7 is in good condition. Some cracks were found but no holes in the epoxy.

Title:	Site Inspection Log	ENVIRON
Site:	Metal Bank Superfund Site	Date: October 9, 2013

Photo 3: Debris (mainly wood pallet chips) from Revolution Recovery has fallen over the wall.

Photo 4: There is good vegetation growth along the fence bordering the Revolution Recovery property.

Photo 5: There is good vegetation growth along the Southern part of the property, adjacent to the Delaware River.

Photo 6: There is vegetation growth along the Northern fence, bordering the Northeast Metals property.

Appendix F

Vegetation Survey

Date: July 16, 2013

MEMORANDUM

To: Joseph Vitale

From: Andrea Fogg

Subject: 2013 Vegetative Cover Inspection

The purpose of this memorandum is to document observations and recommendations from the most recent vegetative cover inspection, completed in mid-May 2013. Thomas Newcomb (a Certified Ecologist) and I (a Certified Senior Ecologist) conducted this inspection.

Observations During the Site Inspection

We conducted our site inspection using the same methods and processes used in last year's inspection. The objectives of the survey were to measure percent vegetative cover and percent cover of invasive species on the landfill.

- Percent vegetative cover - In 2012, the percent vegetative cover was just over 80%. Although this is above the 80% threshold for repair, additional seeding was completed in bare areas to augment vegetative cover. During this year's inspection, percent vegetative cover had increased from 80% to almost 90%, and bare areas are less than a tenth of an acre.
- Percent cover of invasive species – has not changed since last year and remains just below 10%. Crown vetch is 96% of the invasive species cover at the site. It is present in dense patches, although in many areas native grass species are interspersed with the vetch. In some places grass has grown up through the vetch and may even out-compete it.

Meeting with Herbicide Applicator

During the site inspection, we met with Scott Churm (Princeton Hydro), a licensed herbicide applicator with the State of Pennsylvania who is familiar with the invasive species and their management in the state. We invited him to the site so that he could estimate the level of effort required to implement measures outlined in our invasive species control plan. During that site walk, we showed him the areas of Japanese knotweed, common reed, and crown vetch.

Scott expressed concern that chemical control of the vetch, which is most effective using a non-selective herbicide, will result in the loss of non-target species, producing large barren areas once the vetch dies off. This will reduce vegetative cover, decreasing soil stabilization and reducing wildlife habitat, and it is unlikely that desirable species will replace the vetch before other invasive species take over the treated area.

As an alternative to the removal of nearly an acre of vegetative cover by non-selective herbicide application, Scott recommended slowing the spread of the vetch areas by mowing, annually or even more frequently. This less destructive means of control will reduce spread of the vetch, while maintaining vegetative cover at the site. Continual close mowing may drastically reduce

the plant vigor. This method is much more consistent with the overall objectives for the site than widespread, non-selective herbicide application.

As an invasive species, crown vetch may threaten natural areas. However, its presence on the landfill cap is not a threat to natural areas, and it may even be beneficial:

- Crown vetch is a commonly used plant for bank stabilization and erosion control, and it is the "official State Beautification and Conservation Plant" of Pennsylvania, and it has been used by Pennsylvania Department of Transportation (PennDOT) along roadsides throughout the state since 1958.
- Like other legumes, crown vetch fixes nitrogen, improving overall soil quality,
- Crown vetch also provides many of the same wildlife benefits as the native grasses – namely, seeds that provide food for songbirds, growth that provides cover for small birds and mammals, and flowers that provide nectar for pollenating insects.

Recommendations

Based on the above considerations, we recommend the following actions for treatment of invasive species this year:

1) <u>August</u>

- **Treat (spray)** areas of common reed and Japanese knotweed *along the fence line and in ditches and other areas where long term vegetation control is required* with Imazapyr, a non-selective herbicide.

- **Treat (spray)** areas of common reed and Japanese knotweed scattered *across the site where vegetation is desired* (portions of site except for ditches and along fence line) with Glyphosate.

2) *****Optional – In late August, mow** vetch and any other areas that require mowing per the long term monitoring plan and vegetative cover plan. Do not mow common reed or Japanese knotweed (We will need to have an ecologist flag the areas to be avoided prior to mowing.)*

3) <u>September</u> (late summer/early fall - 3-4 weeks after initial herbicide application)

- **Re-treat (spray)** any remaining common reed or Japanese knotweed re-growth with either Imazapyr (fenceline, ditches, or wherever long-term vegetation control is desired) or glyphosate (other portions of site)

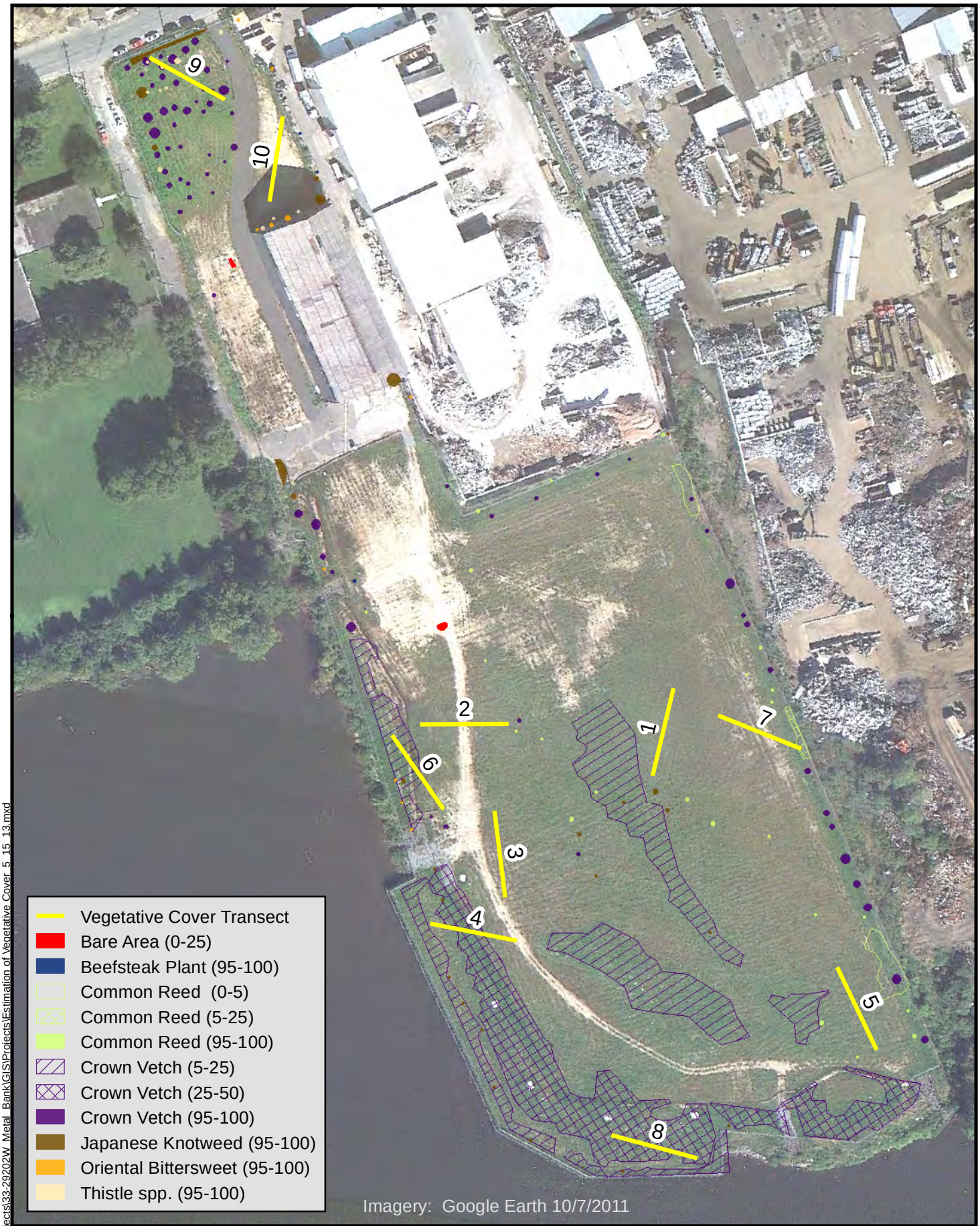
- **Mow** vetch, remaining live or dead Japanese knotweed, and other areas that require mowing per the long term monitoring plan.

- *Do not mow any areas where common reed or Japanese knotweed still survive. Glyphosate is most effective when these plants are fully growing and flowering. (We will need to have an ecologist flag the areas to be avoided prior to mowing.)*

4) <u>September/October (mid/late fall) 4 weeks after secondary herbicide application</u>

- **If before frost, re-treat (spray)** any remaining areas common reed or Japanese knotweed regrowth with appropriate herbicide.

- **Mow** areas of dead standing common reed or knotweed *(We will need to have an ecologist flag the areas to be avoided prior to mowing.)*.



Path: Y:\ Projects\33-29202W Metal Bank\GIS\Projects\Estimation of Vegetative Cover 5_15_13.mxd

ENVIRON

TMN	6/14/12	3329202W

Vegetation Monitoring 5/14/13

Metal Bank, Philadelphia, PA

1 inch = 146 feet

0 50 100 Feet

N

Appendix G

Sheetpile Tilt Monitoring Data

Appendix G
Sheet Pile Wall Monitoring
Metal Bank NPL Site
Philadelphia, PA

In accordance with the approved Long Term Monitoring (LTM) Work Plan (Section 4.8), tiltmeters were installed at three locations (one in each zone) along the sheet pile wall in August 2010 to monitor potential rotation of the wall. EL-SC tiltmeters manufactured by Durham Geo Slope Indicator were installed at the Site. The EL tiltmeter is a narrow angle, high resolution device for monitoring changes in the inclination of a structure. According to the manufacturer, specific applications for these tiltmeters include:

- Monitoring the rotation of retaining walls, piers, and piles,
- Monitoring the behavior of structures under load.

The tiltmeter consists of an electrolytic tilt sensor housed in a compact, weatherproof case. The tilt sensor is a precision bubble-level that is sensed electrically as a resistance bridge. The bridge circuit provides a voltage proportional to the tilt of the sensor.

Each tiltmeter has its own serial number and comes from the manufacturer with an information sheet containing unique polynomial factors necessary to convert the readings obtained in the field to tilt in degrees.

Attached is a Summary of the Sheet Pile Wall Monitoring Results (Summary) as well as the Sheet Pile Wall Monitoring Data Form (Form). The Summary presents the verticality measurements converted to degrees obtained in the three sheet pile wall monitoring zones during the monitoring period from August 2010 to October 2013. The Form includes the tiltmeter number, serial number, location, date that the reading was obtained, the reading (x), and the tilt of the wall converted to degrees. Also included on the form are the unique conversion constants (C5 through C0) for each meter and the Conversion Formula.

Since August 2010, twelve readings at each tiltmeter location have been recorded. The results remain near 0.0 degrees at each location during the monitoring period from August 2010 to October 2013, indicating that the sheet pile wall is not rotating nor approaching the action level of 2 degrees.

The sheet pile wall will continue to be monitored until approval is received from the United States Environmental Protection (USEPA) to discontinue monitoring.

Appendix G Summary of Sheet Pile Wall Monitoring Data
Metal Bank NPL Site
Philadelphia, PA

Monitoring Date	Tilt in Degrees[1]		
	Eastern Location	Central Location	Western Location (Mudflats)
8/24/2010	0.013	0.006	-0.010
9/28/2010	0.001	0.029	-0.044
10/26/2010	-0.002	0.028	-0.040
12/2/2010	0.002	0.046	-0.038
1/4/2011	-0.016	0.028	-0.050
2/3/2011	-0.013	0.031	-0.045
5/17/2011	-0.014	0.044	-0.047
8/17/2011	-0.001	0.057	-0.038
11/16/2011	-0.001	0.057	-0.042
1/13/2012	-0.018	0.071	-0.030
4/25/2012	-0.020	0.054	-0.045
7/17/2012	-0.021	0.061	-0.040
1/25/2013[2]	1.039	0.072	-0.034
4/11/2013	-0.006	0.078	-0.033
7/23/2013	0.006	0.082	0.012
10/9/2013	0.023	0.092	-

1) Per Section 4.8 of the approved LTM: "If the rotation of the wall is determined to be less than two degrees after two years, no further monitoring will be conducted. If the rotation of the wall is determined to be greater than two degrees (after any period of time following commencement of monitoring), then the monitoring will continue and the design engineer will be contacted for corrective measures that may be necessary to halt the rotation."
2) Wires at the Eastern Location were found to be damaged in January 2013 and therefore the value recorded was not accurate.

Appendix G - Sheet Pile Wall Monitoring Data
Metal Bank NPL Site
Philadelphia, PA

Tiltmeter 1: Serial No. 15838 Central Location		Date	Reading (X)	Tilt in Degrees
C5	0.0091976	8/24/2010	0.0258	0.006
C4	0.0113037	9/28/2010	0.127	0.029
C3	-0.0242878	10/26/2010	0.1211	0.028
C2	-0.0169799	12/2/2010	0.2023	0.046
C1	0.235161	1/4/2011	0.1212	0.028
C0	-0.000294	2/3/2011	0.1349	0.031
		5/17/2011	0.1921	0.044
		8/17/2011	0.2495	0.057
		11/16/2011	0.2479	0.057
		1/13/2012	0.312	0.071
		4/25/2012	0.2373	0.054
		7/17/2012	0.2671	0.061
		1/25/2013	0.3185	0.072
		4/11/2013	0.3446	0.078
		7/23/2013	0.3637	0.082
		10/9/2013	0.4081	0.092

Tiltmeter 2: Serial No. 15833 Mudflat Location		Date	Reading (X)	Tilt in Degrees
C5	0.0045921	8/24/2010	-0.0323	-0.010
C4	-0.0051808	9/28/2010	-0.2033	-0.044
C3	-0.0130913	10/26/2010	-0.1822	-0.040
C2	0.0080993	12/2/2010	-0.1696	-0.038
C1	0.20543	1/4/2011	-0.2321	-0.050
C0	-0.003096	2/3/2011	-0.2071	-0.045
		5/17/2011	-0.2159	-0.047
		8/17/2011	-0.1718	-0.038
		11/16/2011	-0.1913	-0.042
		1/13/2012	-0.133	-0.030
		4/25/2012	-0.2055	-0.045
		7/17/2012	-0.1824	-0.040
		1/25/2013	-0.151	-0.034
		4/11/2013	-0.146	-0.033
		7/23/131	0.0729	0.012
		10/9/2013	-	

Tiltmeter 3: Serial No. 15832 River Location		Date	Reading (X)	Tilt in Degrees
C5	0.0174527	8/24/2010	0.054	0.013
C4	-0.0111312	9/28/2010	0.0031	0.001
C3	-0.0116	10/26/2010	-0.0076	-0.002
C2	0.0040952	12/2/2010	0.0078	0.002
C1	0.24277	1/4/2011	-0.066	-0.016
C0	0.0000317	2/3/2011	-0.0553	-0.013
		5/17/2011	-0.0564	-0.014
		8/17/2011	-0.0051	-0.001
		11/16/2011	-0.0024	-0.001
		1/13/2012	-0.0729	-0.018
		4/25/2012	-0.0814	-0.020
		7/17/2012	-0.087	-0.021
		1/25/2013	2.1815	1.039
		4/11/2013	-0.0241	-0.006
		7/23/2013	0.0242	0.006
		10/9/2013	0.0942	0.023

Conversion Formula: C5(X^5)+C4(X^4)+C3(X^3)+C2(X^2)+C1(X)+C0

Note: Wires at the Eastern Location (tiltmeter 3) were found to be damaged in January 2013 and therefore the value recorded was not accurate.